

HISTORY OF INDIAN MEDICINE

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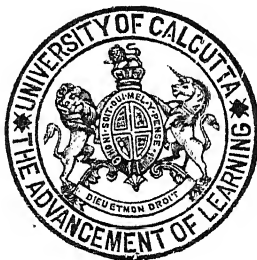
Containing Notices, Biographical and Bibliographical, of the
Āyurvedic Physicians and their Works on Medicine

From the Earliest Ages to the Present Time

By

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DEDICATED
TO
THE MEMORY OF MY BROTHER
MR. SATYENDRANĀTH MUKERJEE
MEDICAL PRACTITIONER

WHOSE UNSELFISH DEVOTION TO SCIENCE AND
TO THE NEEDS OF THE POOR AND HELP-
LESS CAUSED HIS UNTIMELY DEATH
IN THE DISCHARGE OF HIS
DUTIES TO A POOR
PATIENT

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PREFACE

A considerable lapse of time has occurred since the publication of the first volume and the second volume of History of Indian Medicine is now submitted to the public. In arranging the scheme and determining the scope of this work, certain points demanded consideration and it has by no means been easy to arrive at a decision regarding them. A History of Medicine would not be complete if the account of the Sages who promulgated the science did not find a place here. Medical science in ancient times was a subject of study which all learned men, sages, and kings learnt for the benefit of the human race.

In this volume the consideration of the pre-historic period—the account of the gods and sages who took part in the development of the healing art in India, has been dealt with. To know the History of Medicine in Ancient India is to know the entire domain of Indology as the teachers of medicine were sages who were seers of the Vedic hymns, elaborated the philosophical systems, speculated on the existence of God, and were, in fact, concerned in the intellectual history of Ancient India. To deal with such a vast field of study is impossible for any man and many shortcomings would be found in the book. It is restricted to the collection of data which are not even logically and classically arranged. Genealogical tables have been inserted wherever they were needed to elucidate the text.

The article on Śālihotra appeared in part in the *Historical Quarterly*, Vol. I and Vol. II. The introduction appeared in the *Journal of Āyurveda*, Vol. II and Vol. III.

The life of Atri has been described twice through oversight.

My thanks are due to authors for quotations from their books and much of the best in this treatise is due to others. I am under a pleasing obligation to my son Jitendranāth Mukerjee for valuable assistance in the correction of proofs.

156, HARIS MUKERJEE ROAD,
BHOWANIPUR, CALCUTTA.
1st September, 1926.

} G. N. MUKERJEE

As regards the transliteration of Sanskrit words, we have employed the method adopted in the Congress of Orientalists and circulated in the Journal of the Royal Asiatic Society, ignoring in fact, the unpleasant characters of the Sacred Books of the East.

I

SANSKRIT AND ALLIED ALPHABETS.

अ a	ओ o	ट ṭ	व v
आ ā	औ au	ठ ṭh	भ bh
इ i	क k	ड ḍ	म m
ई ī	ख kh	ढ ḍh	य y
उ u	ग g	ण ṇ	र r
ऊ ū	घ gh	त t	ल l
ऋ ṛ	ङ ṅ	थ th	व v
ॠ ṝ	च c	द d	श ś
ऌ ḷ	छ ch	ध dh	ष ṣ
ॡ ḹ	ज j	न n	स s
ए e	झ jh	प p	ह h
ऐ ai	ञ ñ	फ ph	ळ ḷ

˘ (*Anusvāra*) ṁ ṣ (*Avagraha*) ’

˙ (*Anunāsika*) ṁ̃ (Udātta) ˆ

ː (*Visarga*) ḥ Svarita ˜

× (*Jihvāmūlīya*) ḷ̣ Anudātta ˘

× (*Upādhmānīya*) ḷ̣̣

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INTRODUCTION

It is no doubt interesting to find that the public has at last been awakened by a sense of responsibility as to their duty to help in the regeneration and development of Indian medical science. The Hindu physicians themselves have felt the necessity of an organisation among their professional brethren for the consideration of the ways and means for the proper study and improvement of the science of medicine and for propaganda work to train public opinion and enlist public sympathy in its favour. The All-India Ayurvedic Conference was thus ushered into existence. It has been doing useful work in this direction and holds its sittings in different provinces year after year. Important discussions relating to some department of medical science are held there amongst the physicians of various parts of India and Ceylon, irrespective of caste or creed. Such deliberations have not only enriched science but cemented the friendship of delegates who represented the different sections of the population of India. The Head Office of All-India Standing Committee—The Āyurveda Mahāmaṇḍala and Vidyāpīṭha—is located at Cawnpur for the present. About two dozen centres have been opened in the various parts of India to conduct examination of students in Āyurveda. Such centres of examination exist in Bengal, Behar, Oudh, Central India, Delhi, United Provinces, Rajputana, Central Provinces, Punjab, Sindh, Orissa, Drāviḍa, Andhra Deśa, Bombay, Karnatic, Berar, and Ceylon.

Our Government could not sleep over this consciousness of the people to regenerate their own system of medical practice. Colleges for systematic study and research have



been established by the philanthropic and public-spirited citizens which have not failed to attract a due share of sympathy and patronage, however insufficient in comparison to the universal good, the object of such institutions,—from the Government. The municipal and other corporate bodies have realised their duty towards the development of the indigenous system of cure which alone can reach the teeming millions of poor inhabitants through a network of charitable dispensaries and hospitals which will distribute remedial agents at a comparatively cheaper cost. Madras has got its Government School of Indian Medicine, besides the Channa Purai Āyurveda Kalāsālā, established by its public-spirited citizens. Āyurvedic Department has been opened in the Hindu University of Benares with a hospital attached. In this sacred city of the Hindus, and the ancient seat of Hindu learning and culture, the Āyurveda Vidyāprobdhini Pāṭhśālā has been founded. In Rishikul, Hardwar, the Āyurveda Vidyāpīṭha; in Rishikesh, the Bawa Kali Kamblewaleka Āyurveda Vidyālaya; in Pilibhit, the Lalit Hari Āyurveda College; in the Presidency of Bombay, the Prabhurām College;—all bear testimony to the self-sacrifice and energy of the founders and promoters of these centres of education. The Āyurvedic College of Gurukul, Kangri; the D. A. V. College of Lahore; and the Āyurvedic and Unani Tibbi College of Delhi, are now recognised institutions for the cultivation and advancement in the science of Āyurveda.

The Indian chiefs were not slow to manifest their sympathy towards this renaissance of Āyurvedic treatment. Jaipur had been the seat of a college of Āyurveda—the Jaipur Rāj Āyurvedic Vidyālaya—financed and maintained by the State from a long time. The Mahārājā of Alwar is well-known for his encouragement towards

Āyurvedic studies. The Gawalior Rāj Āyurveda Vidyālaya, the Mysore Government Āyurveda College, the Patiala Rāj Āyurveda Vidyālaya, the Trivandrum Government Āyurveda College, and the Baroda Rāj Sanskrit Parikṣā Samiti and the Āyurveda Mahāvidyālaya, Patan, Baroda State, are unmistakable proofs of the faith of the noble Princes who are at the helm of these principalities. The Thakore Saheb of Gondal is well-known for his interest in the Āyurvedic science. Bharatpore spends a good sum for the treatment of its subjects according to the Āyurvedic method, and other States are helping in this regeneration of Āyurveda.

Besides the Madras Government College of Āyurveda, there are other colleges founded by our Government: The Behar Government Āyurveda Vidyālaya at Jagga-nathpore; the Muzzaffarpore Government Āyurveda Vidyālaya; and the Āyurvedic and Unani College at Delhi. The U. P. Government has the intention to appoint a committee to enquire about the indigenous system of medicine. The Government of the United Provinces has sanctioned the annual recurring grants-in-aid of Rs. 30,000 for the benefit of the Āyurvedic institutions under its jurisdiction and for the sanction of a donation of Rs. 50,000 and an annual recurring grant of Rs. 5,000 in aid of the Rishikul Āyurvedic College.

In Bengal an Āyurvedic Committee was appointed by the Government of Bengal in August 1921. In 1925 the Committee submitted a Report for the consideration of the Government. The decision of the Government of Bengal is being anxiously expected by the people but we do not know when it will be made public. Three Āyurvedic Colleges have been started in Bengal; the Aṣṭāṅga Āyurveda Vidyālaya, the Vaidya Śāstra Piṭha, and the Āyurveda Vidyālaya named after Govinda Sundarī,

the mother of Mahārājā of Cossimbazar. Of these the Aṣṭāṅga Vidyālaya is better equipped with library, laboratories, etc., and is likely to have its buildings completed soon. The Corporation of Calcutta appointed a Committee to find out means for the amalgamation of the three colleges, but notwithstanding the best efforts of the committee the amalgamated College of Āyurveda could not be established. I was a member of the committee, and the report we submitted is annexed herewith for the information of the public. The Corporation has sanctioned grants-in-aid for the three schools. The Corporation has opened Āyurvedic charitable dispensaries in the different quarters of the town. Four charitable dispensaries have already been started in its four districts,—an example which has stimulated other provinces and even villages. The Municipalities, District Boards, Union Boards and benevolent citizens have thus recognised the claims of Āyurveda as a system of medicine which requires improvement and help.

In Ceylon, the Laṅkā Āyurvedic Medical College with a Hospital attached has been opened at Jaffna. The Karnataka Āyurvedic College of the Andhra Research University has been established at Vizianagram. Even institutions established to teach Western system of medicine have incorporated Āyurveda as one of its subjects in the final examination. The Jāṭiyā Āyurjībana Vidyālaya or the National Medical Institute of Calcutta teaches Āyurveda in its fifth year as a subject in the curriculum of studies.

Associations for the cultivation and improvement of the science have been founded. Two associations—the Āyurveda Sabhā and the Brāhman Āyurveda Sabhā have been established in Calcutta, and are doing useful work.

A Journal of Āyurveda has been started in Calcutta.

Contribution from renowned physicians of Calcutta and eminent Vaidas in the domain of Āyurveda and kindred science are being published month after month. Similar journals are being published from other provinces, though the scientific value of such publications requires better management as regards choice of articles and contributions. When I began to study Āyurveda contributions from the Graduates of the Medical Colleges of India were few and far between, but now well-read and experienced physicians are coming forward with their excellent articles on some aspect of Āyurvedic studies. Thus an attempt is being made to resuscitate the knowledge embodied in the Āyurvedic literature, not only by the practitioners of the art but also by the learned men from a love of scientific investigation.

The original works on Āyurveda are written in Sanskrit language. Many of the works have been translated in the vernaculars of the different provinces. The works of Caraka and Suśruta have been translated in the English language, and it is available to all in its European garb.

Attempts are being made to write original treatises in Sanskrit and to edit and revise well-known text books, incorporating modern scientific knowledge in the light of Āyurvedic theory and practice. Some of the original productions of the Ṛṣis have been edited with original commentaries written by the editors.

Publications of Āyurvedic books are being taken in hand by the enterprising proprietors of the Nirṇayasāgar Press, Bombay, Śrī Venkateśwar Press, Lakṣmī Venkateśwar Press, Jñānsāgar Press; Benimādhav Dey, Jivānanda Vidyāsāgar, Baṅgabāṣī Press and C. K. Sen and Co. of Calcutta. The University of Calcutta has given me every facility in the publication of my contributions towards the study of Hindu Medicine, and has published

the highly original treatise of Bhela which was not available to scholars. It is no doubt highly gratifying to me that Bhela Saṁhitā has been edited and published as I pointed out the desirability of the publication of its manuscript from the Tanjore Library in the Introduction to Vol. I, p. 34, of this book. The example thus set forth by the University of Calcutta should be followed by the other Universities of India.

The Śāstric medicines are being tested scientifically at the School of Tropical Medicine and the Āyurvedic Conference has recommended the necessity of inclusion of effective and useful medicaments of other systems of medical practice in the science of Āyurveda. Consequently we may entertain the hope that in the near future the system would be thoroughly renovated to be of practical use to the people for whom it is intended.

As I was requested to express my opinion on the desirability of the restoration and development of the Āyurvedic medical science and to give evidence before the Āyurvedic Committee appointed by the Government of Bengal, I submitted my report for the consideration of the committee. The scope of my inquiry is described in the following letter, dated the 1st of September, 1923. After the submission of my report I received the questionnaire prepared by the Committee as to the points on which information was required. The oral evidence before the Committee was taken on the 6th November, 1923, and an abridged copy of it is also attached with the report.

The Committee referred to in the letter consisted of learned members, official and non-official. Dr. M. N. Banerji, B.A., M.R.C.S. (Eng.), L.S.A. (Lond.), was the President of the Board; and Major R. N. Chopra, M.A., M.D., B.Ch. (Cantab.), I.M.S., was its Secretary.

I received the following letter from the Secretary :

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AYURVEDIC COMMITTEE,
BENGAL.
School of Tropical Medicine.
Calcutta, 1st September, 1923.

To

Dr. Girindra Nath Mukerjee,
B.A., M.D., F.A.S.B.

SIR,

The Government of Bengal appointed a committee to consider and report, after taking such evidence as may be thought necessary, what practical steps can be taken for the restoration and development of the Ayurvedic system of treatment, with special attention to the question of teaching of that system, with any necessary modifications, under proper supervision and control.

The committee so appointed circulated a questionnaire last year to nearly 400 distinguished Kavirajas and other gentlemen interested in this subject, but received replies from sixty only. A large majority, whose views could be of great value and help to the committee, refrained from replying or expressing their opinion.

It has been urged that the question of restoring and developing the Ayurvedic system of medicine is very important to the country not only from economic considerations but also from the point of view of bringing medical relief within easy reach of the great masses of suffering humanity especially in the rural areas.

Western medicine has done and is doing a lot towards this end, but inspite of all efforts a large majority of the population are without adequate medical relief.

It has also been urged that even in Calcutta where

there are so many Government and other hospitals and dispensaries, a great number of people resort to Ayurvedic and other institutions of the indigenous systems, either for preference or for low cost of treatment. From the evidence already obtained it appears that the Ayurvedic system for various reasons has not made much progress for many centuries and in some instances has actually lost ground. The question before the committee now is in what way can this system be restored and developed, and also how it can be taught to suit modern requirements.

In consideration of the very important issues involved, may we appeal to you to please give us your views on this subject with special reference to—

(1) Need for restoring and developing the system on scientific lines to suit present-day requirements and the way in which it can be accomplished.

(2) Teaching institutions and hospitals required with a scheme of their working.

(3) General qualification of students before commencing Ayurvedic study. Medium of instructions suited for Bengal. Period of study and course of instruction. Diplomas which may be granted.

(4) Present condition of the literature and the steps which can be taken for making it available to the students and practitioners in suitable form.

(5) Present status of Ayurvedic practitioners, its disadvantages and the remedies for the same. Whether registration is necessary.

(6) Steps to ensure proper production, collection and sale of drugs. Standardisation of preparations in common use.

(7) How the Government, local bodies (such as Municipalities and District Boards), Universities and private enterprise can help in developing the system.

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The Committee will consider it a great favour if you would kindly give your opinion on all or any of the above points in a written statement or make it convenient to meet the Committee at any time or place that may suit you so that they may have an opportunity of discussing various important points with you.

As the Government are pressing for a report the committee solicits a reply to the undersigned before the 20th of September.

Yours faithfully,

(Sd.) R. N. CHOPRA,

Major, I.M.S.,

*Secretary, Ayurvedic Committee, Bengal,
School of Tropical Medicine, Calcutta.*

I submitted my views on the 25th of September, 1923. Then the Secretary sent me the questionnaire with the following letter :—

AYURVEDIC COMMITTEE, BENGAL.

School of Tropical Medicine.

Central Avenue, Calcutta.

DEAR SIR,

I am in receipt of your very interesting memorandum in reply to my circular letter dated 1st September, 1923 and I thank you for the very valuable information you have conveyed.

I am herewith sending you a copy of the questionnaire and if you can throw any more light on any points mentioned therein the Committee will feel very grateful.

I hope the Committee will have the opportunity of meeting you soon. They particularly wish to discuss with you the full working details of the Central Ayurvedic College and Hospital you have suggested. If you can

give any further information in writing before we meet it will help the discussion considerably.

Yours faithfully,
(Sd.) R. N. CHOPRA,
Major I.M.S.,
Secretary.

Questions to Witnesses.

1. What sections of the Indian public take advantage of the Ayurvedic system of medicine?

Please give figures from charitable institutions or from your personal experience if possible.

Will adoption of the system facilitate medical aid in general to the section of the population who are not getting it at present?

2. How would you revise the system and restore it?

Would you do it in all eight divisions (Ashtanga)?

If so, what methods would you suggest?

Are you in favour of scientific investigation and of incorporating new discoveries into the system?

3. What is the special field, if any, of Ayurvedic medicines as practised at the present day?

Please specify any line of treatment of drugs which in your opinion are specially efficacious and superior to those in other systems.

4. To what extent was the Ayurvedic literature developed at the time of the original exponents of the system?

What is its present condition and what are the causes which led to it?

Have attempts been made to bring the system up to date?

How can such attempts be encouraged?

5. With a view to more efficient teaching of the system to meet present-day requirements, would you please state the position of existing literature in:—

Human Anatomy and Physiology; Materia Medica; Medicine and Surgery (including Pathology); Gynæcology and Obstetrics; Hygiene and Preventive Medicine.

Please give a list of important works in these subjects. Have these been printed, if so are they suitable for students and probationers?

If there are any deficiencies, how can they be made good?

6. What steps can be taken for collecting and publishing standard editions of Ayurvedic works so as to make them available in sufficiently easy form for average class of students and practitioners?

7. What is the present method of obtaining crude drugs and making preparations?

Have any attempts been made,

(a) To standardise and to find out therapeutic and lethal doses of drugs and preparations in use?

(b) To ensure proper production, collection and sale of drugs?

Please give your suggestions as to how this can be carried out effectively so as to have a uniform standard for the guidance of all concerned.

8. How does the cost of treatment by this system compare with Allopathic systems? If possible please quote figures from records of existing institutions or your own cases?

Is it true that the cost of some of the drugs is prohibitive?

9. What are the present arrangements for teaching of this system in India generally?

Is there any central organisation controlling the students? If so what are its methods?

Please give suggestions as to how these can be improved.

10. If an Ayurvedic school recognised by the Government is established, would there be

- (a) Sufficient number of students forthcoming?
- (b) Possibility of getting requisite number of qualified teachers in different branches?
- (c) Sufficient clinical material available in the hospitals attached for training of students?

Would such a school improve the status of Kavirajes passing out? What in your opinion would be the cost of a well equipped teaching institution?

11. What should be the general qualifications and preliminary training of students before starting the study?

What should be the period of study and medium of instruction?

12. Do you consider the study of modern scientific methods as illustrated by the study of Physics, Chemistry, Biology, Human Anatomy and Physiology, in the early part of training, and Pathology and Bacteriology in the latter part essential or not?

With a view to economy, would it be possible for the lectures and practical training in these subjects to be attended in any of the recognised medical schools?

Can any other subject such as Surgery be treated in this way? If not what would you suggest?

13. Should the course for the students be prepared with special reference to progressive standards (*e.g.*, L.M.P. of Medical Schools as in cases of Sub-Assistant Surgeons and M.B., B.S., and M.D., of Universities as in cases of Assistant Surgeons) or otherwise?

14. What are the disadvantages from which Ayurvedic practitioners suffer and what remedies can you suggest?

15. Do you consider registration on the same lines as medical registration desirable?

If so, how would you constitute the Registration Board and what safeguards would you propose for existing practitioners ?

If not, how will it be possible to distinguish real Vaidyas from quacks ?

16. How in your opinion can, the Government, local bodies such as Municipalities, Universities and private enterprise help in restoring, developing and fostering the system ?

17. Can you give an idea as to cost of restoration and development of the system, to suit modern requirements, on the lines indicated by you ?

I sent the following reply on the 25th September 1923 :

Reply

To

MAJOR R. N. CHOPRA, M.A., M.D. (Cantab.), I.M.S.,
Secretary, Ayurvedic Committee, Bengal.
School of Tropical Medicine, Calcutta.

SIR,

I beg to acknowledge the receipt of your letter dated the 1st September, requesting me to supply you with information on the question of restoration and development of the Ayurvedic system of treatment, and, in reply, I have the honour of submitting for the consideration of the Committee the results of my inquiry and my individual experience on the subject.

2. Before we enter into details of the various questions mentioned in your letters it may not be amiss at the outset of an inquiry, to set out with a short description of the work done by our Government to resuscitate knowledge in the Ayurveda.

3. Dr. Buchanan, as quoted by Mr. Montgomery in his work "*The History, Antiquities, Topography, and*

Statistics of Eastern India " 1807, states as regards the province of Behar: " Medicine is taught by several of the Pandits, some of whom also, although they are grammarians, practise the art." " Besides the Professors of Medicine, about 700 families of Brahmins, almost all of Sakadwipa, practise the art, and are the only Hindu physicians who possess anything like science, except three of the Medical tribes from Bengal, who have settled at Patna." The traditional system of training of Kabirajes which has lasted for many centuries in Bengal, has always been exclusively literary in character. The Vaidyas learn their medical science mainly from books and from oral tradition from the *Gurus*—the learned physicians of the time, who generally taught a number of students without fees. Similar practice still exists in the '*Tols*.'

4. In 1811 Lord Minto recommended the establishment of Colleges at Nadia and Trihut with a view to the restoration of indigenous learning in Bengal under the management and control of the Government. The East India Act of 1813 authorised the Governor-General in Council to set apart a sum not less than one lac of rupees from the public revenue and spend it for the revival and improvement of Sanskrit literature and to the introduction and promotion of knowledge of European sciences amongst the people of the country. The Court of Directors pointed out that the Sanskrit language contained many excellent treatises on ethics, medicinal plants and drugs, astronomy and mathematics; and they ordered that steps should be taken to induce the people to adopt modern improvements in sciences. The Court directed the Governor-General to submit proposals to give effect to the principles laid down.

5. The Sanskrit College was opened on the first day of January 1824. This year forms a landmark in the history

of education in India. The Calcutta Madrassa (1781) and the Hindu College (1817) had already been founded but at the personal expense of Warren Hastings and by public subscriptions respectively. The establishment of this College marked the first definite recognition by the East India Company of its responsibility for the education of the people. The purpose of the Institution was laid down in the famous Resolution of Government dated 21st August, 1821: "The Committee will bear in mind that the immediate object of the institution is the cultivation of Hindu literature. Yet it is in the judgment of His Lordship in Council a purpose of deeper interest to seek every practicable means of effecting the gradual diffusion of European knowledge." In this college, the "General Committee" decided to impart knowledge of medical science—European and Indian—to the students of Sanskrit College. In 1826, Dr. Tytler began his lecture on Medicine according to Western method, and Professors were appointed to teach Caraka, Suśruta, Bhāva Prakasa, etc. Classes for the Āyurvedic students were opened in 1827. The classes were well attended. The justly celebrated Pandit Madhusudan Gupta was a student of this class and learned the science according to both systems. He became one of the Professors entrusted with the teaching of the science. His students handled bones and dissected animals. We quote the words of Professor Wilson, the Oriental scholar, who examined the students of the medical class: "The triumph gained over native prejudices is nowhere more remarkable than in this class, in which not only are the bones of the human skeleton handled without reluctance but in some instances dissection of the soft parts of animals performed by the students themselves." (See *Minutes of Evidence of the House of Commons on the*

Affairs of the East India Company, 1832, page 994.) In 1831, Dr. J. Grant began his lectures on Anatomy and Physiology, Diagnosis and Surgery.

6. In 1833 Lord William Bentinck, the then Governor General of India, appointed a Committee for the revision of the whole question of medical education in Bengal. The Committee comprised the following gentlemen :

Surgeon J. Grant, Apothecary General.

J. C. C. Sutherland, Esq., Secretary to the Education Committee.

C. G. Trevelyan, Esq., Deputy Secretary, Political Department.

Assistant Spens, Body Guard.

Assistant Surgeon Bramley, Marine Surgeon.

Baboo Ramcomal Sen.

In 1834, the Secretary to the General Committee requested Dr. Tytler about his opinion as to the advisability of adopting English as the medium of instruction, of teaching the students books on European medical science only, and of abolishing the Āyurvedic classes, as many doctors were of opinion that the students should be taught according to a definite system of medical study. Dr. Tytler was for the continuance of the system in vogue, *i. e.*, European and Āyurvedic systems. The Committee worked for twelve months. Rev. Dr. Grant was its President. It was decided that English should be the medium of instruction, and medical classes in Sanskrit College and the Madrassa should be abolished. The final decision of the Committee was submitted to the Government in an elaborate Report on the 20th October, 1834.

Dr. Tytler is better known to the public for his correspondence with Rājā Rām Mohan Roy, occasioned by a passage in a letter of the Doctor, published in the *Bengal Hurkara* of the 30th May, 1823, regarding the

doctrine of Divine Incarnation. It appears that the Doctor was completely silenced by the renowned Rājā, under the pseudonym of Rām Dāss.

By the famous Minute of the 2nd February, 1835, Lord Macaulay won the definite victory of the Western School over the Orientalists. Rev. Dr. Duff and his Anglicist party decided that English should be the medium of instruction; against Dr. Tytler, the Superintendent of the 'Native Medical Institution,' which was founded by Government in 1822, and in which it was found practicable to teach Bengali students the modern science of medicine through the medium of the Bengali language.

The Committee prefaced their recommendations thus :—

“The scheme of reform, too, we would especially submit to your Lordship, ought to be ample, comprehensive, and worthy of a great Government, not intended merely to supply the wants of the State, but of the people, and to become, what it may confidently be expected it will, a moral engine of great utility and power.”

7. The Medical College of Bengal was established on the 20th February, 1835, with Dr. Bramley as the Superintendent and H. Goodeve as his assistant. The Government ordered on the 28th January, 1835, abolition of the Native Medical Institution and the medical classes in the Sanskrit College and the Madrassa. Pandit Madhusudan was transferred to the new College and had two assistants assigned to him. The question of dissection of the human body was found to be a stumbling-block to the progress of the students in Anatomy, and the Pandit showed his manly courage in defying the time-honoured prejudices of his countrymen by his dissection of the cadaver on the 10th January 1836. This date marks a new era in the history of Western education in India. Opinions differ as regards the exact date.

Some say that on the 28th October, 1835, four young Hindus (Madhusudan being leader of them) dissected a cadaver.

The study of the Āyurveda gradually came to an end by the establishment of the Medical College, where European medicine began to be studied with enthusiasm. No attempt has been made by the Government since then to revive the study of the Indian medical science, although the science is still studied by many in Bengal and elsewhere:—the torch of light has been kept burning by the zeal and the scientific spirit of the poor physicians without any help from the State which has done so much in educating the Indian youths in other branches of learning. The scientific men in the Indian Medical Service, trained in the most up-to-date methods of the West, naturally thought the study of the medical science of the Hindus mere waste of time, and the Kabirajes, confident of getting no encouragement from a foreign Government, kept themselves aloof from the modern scientific world; even they looked with a suspicious eye towards any interference by the State in shape of improvement in the various branches of the science. It is for this reason that you have received so scanty response to your very important Questions which you circulated amongst many distinguished Kabirajes of Bengal.

8. As regards the need for restoring and developing the system on scientific lines to suit modern requirements, I take the liberty of referring you to the *Introduction*, pp. 67-157, in *Vol. I* of my work on the '*History of Indian Medicine*,' recently published by the Calcutta University. Apart from questions of academic and historical interest which the study of the Āyurveda may solve, there is a practical side of the study which we cannot ignore. It can be said without fear of contradiction

that medical aid, as at present available, does not meet the requirement of the rural population in Bengal. There is a steady and increasing demand for medical men, of somewhat lower standard than that of the Sub-Assistant Surgeon,—medical men of a type similar to the old type of the Native Doctor, as the income of a doctor in a village is not attractive to the highly trained Assistant and Sub-Assistant Surgeons. The spread of education will increase the urgency for more trained men, and as the Medical Colleges and the Medical Schools are full, rather over-crowded, it is the duty of the civilised Government to provide for this increasing demand of the population. Medical Schools may multiply but the Medical Colleges take time to develop; and the cost of establishing such institutions is almost prohibitive. The need for qualified physicians for rural districts may be met with in three ways:

(1). The establishment of Vernacular Medical Schools. A similar institution once existed in Bengal. In 1832 an additional Urdu class, and in 1852, a Bengali class were opened for instruction of the students. The qualified students from such schools were called H.A., or V.L.M.S., or "Native Doctors." Such doctors would have to compete in the practical field with the Graduates of the Medical Colleges, the Licenciates of the State Faculty and the Hospital Assistants from Medical Schools maintained by Government. The older class of Native Doctors died a natural death long before, and the repetition of the same experiment would give us the same result.

(2). By an increase in the number of students in the existing Medical Schools we may increase the number of the Hospital Assistants. The Medical Schools are at present over-crowded, and new institutions must be established to cope with the increasing demand. Apart from the cost

of maintaining such schools by the State, the poor villagers in the rural areas would not be able to satisfy these trained doctors who consider their services too valuable for the poor.

(3). We may avail of the services of the Āyurvedic physicians trained in a scientific way. With the establishment of the Āyurvedic College, knowledge of such physicians may be improved by modern methods of teaching medical sciences. It is useless to deny that still the Āyurvedic system of treatment has much influence over educated Indians who are fully aware of the immense benefit of the Western methods of cure. I need not enter here as to the cause of this strange mentality of the Hindus. But so far I am sure that the people of the rural areas would consider it a blessing if they can secure the services of scientifically trained Kabirajes whose charges for treatment would be deemed reasonable by the public and who will be satisfied with their comparatively smaller earnings.

9. *The importance of the Āyurveda.*—The methods of treatment according to the Āyurveda are called empirical. But the so-called empirical methods of treatment were founded on experiments, observations and experience which extended over many centuries. Even some of these observations have been declared by competent authorities to be reliable. About the importance of the subject, I have dealt with it in 'The Conclusion,' Chap. IX of Vol. I of my contribution on "*The Surgical Instruments of the Hindus*," published by the Calcutta University in 1913, and I again take the liberty of referring you to its pages 329-362. Here I may mention a few examples of our indebtedness to the indigenous system:—the use of the salt-free diet in the treatment of the dropsical affections, the use of salt in the treatment cholera, liquid food in typhoid

fever, in which even milk is withheld, cooling regimen in small-pox and measles as advocated by Sydenham, the importance of bael and kurchi in dysentery, the use of preparations of mercury, iron and arsenic internally, use of neem and chalmugra oil in leprosy, musk and makara-dhwaja as stimulant, and other medicaments too numerous to mention. In the fields of surgery, obstetrics, pathology, and hygiene, we come across observations which, if known earlier, would have saved the labour of scientific men to an appreciable extent. The use of various cooling oils in the treatment of nervous disorders should be scientifically investigated, as there is a deep-rooted belief in the Indian minds that we scarcely possess any curative agents which are equally efficacious.

10. I may here point out that all sections of the Hindu community take advantage of the Āyurvedic system of treatment. The Hindu widows, as a rule, prefer the indigenous medicines and object to taking medicines imported from the West. The old men and patients suffering from chronic diseases show a decided bias towards the medicines prepared by the Vaidas. The Bengali Musalmans also use medicines prescribed by the Kabirajes. The educated Indians firmly believe that the indigenous medicines which are generally freshly prepared act better on the constitution of the native population than the medicaments of the British Pharmacopœia imported from Europe.

As regards the methods for restoring and developing the system of medical treatment opinions differ. But the majority of those learned men who have bestowed any thought on the subject consider the following items as the principal methods of popularising the study of the Āyurveda :

- (1). The establishment of a Central College of Āyurveda, managed under Government control or under a

Board of Āyurvedic Study under Government supervision. The subjects must be taught according to modern scientific method.

(2). Establishment of hospitals for the treatment of patients according to Āyurvedic system.

(3). Foundation of charitable dispensaries in rural areas for the treatment of the poor people.

(4). Foundation of a scientific Library for the use of the students, professors, and practitioners of the healing art. In such a Library not only books on the Āyurvedic system should be collected and catalogued, but also books dealing with the cognate sciences of medicine and other methods of treatment should be available.

(5). Translations of Sanskrit books and manuscripts into English should be encouraged, for then only can we expect healthy criticism from the savants of the world.

(6). The text books as read by the students of Āyurveda require to be recast and re-edited to suit our modern conditions of life. The Āyurvedic system suffered many vicissitudes, and text books were compiled and edited to suit the changed conditions of life. During the Vedic period the vegetable simples only were used and its literature is scattered in the *Atharva Veda* and in the *Āyurveda* which is lost to us. In the Pre-Buddhist period Agniveśa and Suśruta wrote their treatises which were recast by Caraka and Nāgārjuna respectively. Caraka's edition was again improved and enlarged by Dṛḍhvala during the Paurāṇic period. The *Caraka Saṁhitā*, as we find it in its present form, is a systematic treatise, which has undergone additions and corrections by different physicians in different times. Lastly came the *Rasa Granthas* the chemico-medical texts of the physicians of the Iatrochemical school, who began to cure diseases by means of mineral drugs of which mercury was the most commonly

used. Bhāva Mīśra wrote his compilation, a voluminous work, the Encyclopædia of Hindu Medicine, some 350 years ago, in which the author boldly advocated many new drugs of foreign origin and described many new diseases unknown to former authors. This proves that the Kabirajes are not unwilling to improve themselves as regards new innovations in the methods of treatment and inclusion of new diseases and new drugs not hitherto mentioned in their works.

(7). Exhibitions of drugs, appliances, the actual methods of preparation of medicines requiring technical knowledge, the methods of collecting, sorting and storing medicines, and various articles of interest to the physicians in their daily practice may be held to stimulate curiosity and investigation in a scientific spirit.

(8). Popular lectures dealing with improvements in hygiene and cognate sciences illustrated by lantern slides, pictures and drawings to elucidate the subject.

(9). Therapeutic gardens : *vide infra*.

(10). Museums. The importance of a museum in teaching a scientific subject has been recognised by eminent authorities, and our space forbids any detailed description of a museum for medical studies.

For the rôle played by the library, exhibitions, museums, and popular lectures, I take the liberty of referring you to *Vol. I* of "*History of Indian Medicine*," pages 138-169.

11. *The establishment of teaching institutions*.—It is absolutely essential that a Central College maintained and recognised by the Government for the teaching of the Āyurveda be established in Bengal without further delay. In the College, provisions should be made for the study of the various sub-divisions of the Āyurveda, namely medicine, surgery, midwifery, children's diseases, pathology, materia medica, anatomy, physiology, hygiene, medical jurisprudence, and the elementary sciences, *viz.*, biology,

physics, chemistry, according to the modern scientific methods.

Tols.—The system now in vogue, *viz.*, the students learning the science of medicine from individual teachers or *Gurus* has, no doubt, much to be said in its favour. Such a system has all the advantages of a residential university and is well adapted for teaching literary subjects in a poor country. But the teaching of subjects which require manual dexterity from the votaries must fail in its object if learned in theoretical lectures only—no matter how eminent the professor or lecturer may be. The college should be the central institution where the students from these indigenous *tols* should attend to complete their studies. They must attend the practical classes which can only be arranged in a college fitted with laboratories for the different subjects prescribed in the curriculum of studies. At present the *tol* system may be retained, and as in Sanskrit education we have the Sanskrit College and the *Tols*, the dual system of study may be followed for a time. But it must be, however, clearly borne in mind that sooner the *Tol* system of medical education be stopped, the better.

There are, no doubt, considerable difficulties to surmount. Instruction is to be delivered in a foreign tongue in the college to students full of prejudices and of inactive habits. The lecturer shall have to teach, and translate. He shall have to create a demand for medical and surgical skill, where there was felt no want for them. The pupils, on the other hand, cannot be very enthusiastic—their prospect in life distant and somewhat indefinite. In private practice, they shall have to fear ridicule and opposition from the Graduates of the Medical Colleges and Licenciates from the Medical Schools who may vaunt for their superior knowledge. There are

no text books suited to modern times : such books must be written in English and vernacular. The preliminary education acquired by the students who intend to prosecute their studies is far from satisfactory ; the level of their general knowledge is too low for the superstructure of medical science. But by zeal, energy and devotion to work progress can be made, and ultimately success may be achieved.

12. *Hospitals.*—No medical institution is complete without hospitals. A complete knowledge of diseases can only be acquired in the wards of a hospital. It is, at the bedside of the patient, and not from books, that the practical application of medical studies can be mastered, clinical knowledge gained, observations on diseases made and the methods of cure studied. As the system of teaching now stands, students attend to the preparation of medicines and thus learn pharmacy and materia medica practically. They attend to the patients who come in number to the dispensary of their teacher and thus learn diagnosis and treatment. But surgery cannot be learned without a hospital, and we have evidence that in ancient times and even at comparatively recent times the Āyurvedic surgeons practised their art in hospitals. I may mention here that the Chāndsi doctors, who still carry a lucrative trade in Calcutta, are in the habit of keeping patients in their own house in a room called by them 'hospital' at their own cost and thus acquire skill in performing certain surgical operations, e.g., piles and fistula-in-ano. The Māls learn reclamation of cataract in a similar way, and the Madrasī doctors become, as they say, experts in fistula operations.

13. *The location of the college and the hospital.*—To establish college and hospital, ample space must be acquired for class rooms, laboratories, and libraries. The problem of students' residence must be solved ; residential

hostels, houses for the staff and playing ground for the students must be provided. The Principal requires a separate house to live in, and the Resident Surgeon and Physician must have quarters assigned to them. The acquisition of land in the centre of Calcutta is very costly. But it is not desirable, on many grounds, that the college is established in any rural area at a very great distance from the town. The college may conveniently be established in a suburban site, preferably towards Tollygunge, or Chetla, or Alipore, where land is still available to any extent required by Government for the purpose. A college located in these places would be easily accessible to students who reside in Calcutta and its neighbourhood.

14. *The scheme of the proposed college and hospitals and their working.*—The college should have a four-year course, and the different subjects may be studied as follows:

First-year—Physics, Chemistry, Biology and Anatomy.
Dissection and Practical training in scientific subjects.

Second-year—Anatomy, Physiology, Materia Medica, Pathology, Dissection, Practical classes, and Hospital duty.

Third-year—Medicine, Surgery, Midwifery, Hygiene, Clinical Medicine and Surgery, Labour cases, Hospital duty—medical and surgical, and Operative Surgery.

Fourth-year—Same as in the third year, Medical Jurisprudence and History of Medicine.

After a few years, it would be found that a five-year course would cover the subjects better than a course of four years. The preliminary scientific studies should be taught in a very elementary manner, and only with special reference to the subjects required for proper elucidation of the medical science.

To run such an institution efficiently, the services of the following professors are absolutely necessary :

1. Professor of Biology.
2. „ Physics and Chemistry.
3. „ Anatomy and Physiology.
4. „ Materia Medica and Clinical Medicine.
5. „ Medicine including Mental diseases, and Hygiene. He is to act as Principal of the College.
6. „ Surgery including Dentistry, and Diseases of the Eyes, and Clinical Surgery.
7. „ Midwifery, Diseases of Women and Children.

The salary of the professors should be from Rs. 150 to Rs. 300, and the salary of the Principal should be Rs. 500 per month.

There would be required Demonstrators for Biology, Physics and Chemistry, Anatomy and Physiology, on a salary of Rs. 75 to 150 per month. All the professors and demonstrators must have medical qualifications.

The State must encourage original researches in the medical and allied sciences by special grants from the public treasury. Endowments or establishment of Fellowships, Lectureships, and Readership for researches in the Āyurvedic studies should be sanctioned. There should be scholarships, prizes or rewards for the meritorious students.

The Hospital must contain wards for medical, surgical and gynæcological cases and should have provision for out-door patients. It is not necessary to enter here into detail of the hospital work.

The capital outlay necessary for starting the college and the hospital on the basis of my recommendation could not be put below two lacs of rupees. Considering the present financial difficulties of the State, a start may be made in some existing Government buildings, where accommodation for laboratories, lectures and hospitals is available. A library with seminar rooms, offices and Principal's quarters will be located in the same buildings. I am not aware of any such Government building being available, except the premises known as the "*Hastings House*" situated in Alipore. This house may serve our purpose admirably for the present and may be used permanently if the authorities so desire. The house with a historic fame has ample accommodation for a college, is situated in the southern division of the town and is easily accessible to students from all parts of Calcutta. In this building an educational institution was started a few years ago, but as it exists no longer, the authorities are free to sanction its use for a more useful institution which will prove highly beneficial to the public at large, and will redound to the glory of the benign administration under whose care we all live.

The amount of the recurring annual grant from the State for the college, necessary to run it efficiently,—though we cannot name a figure offhand,—cannot be less than Rs. 25,000 per year for the present. It is possible that a successful administration may be able to achieve the result desired at a comparatively less cost; but as the details are to be worked out afterwards we need not consider about the exact figure. We must make attempts,—and we believe such attempts would meet with favourable response,—to tap new sources of revenue as from Municipalities, District Boards, and to obtain benefactions from the public.

15. *Qualifications of students who intend to study Āyurveda.*—There is difference of opinion as regards the minimum qualification of the students who would be eligible to prosecute studies in the college. I have referred to what Suśruta says about this question in page 37 of "*History of Medicine*," Vol. I, and I need not dilate it here. There can be no doubt on the dictum that "a physician should be a man of science trained after the best manner and according to the discipline of the science of the age." There is a vast number of students who have passed the Matriculation and I. Sc. Examinations of the University. They do not find any accommodation in colleges of science or arts to prosecute further studies. Admission the Medical Colleges is difficult for them as the number of applicants far exceeds the maximum number of students who can possibly receive adequate facilities to learn the subjects of study in the colleges. The result is that the students sit idly at home as they find no work for them. I would not be astonished if these educated young men without any work and hope in this world, were easily led astray by designing men and ultimately became criminals. These students would like to study the science of Āyurveda, and I hope they will come in number and will welcome this new field of activity open to them. What they want is that they should be regularly taught and that they should be recognised by Government if they can pass their examinations creditably. Under these circumstances, I am of opinion that the minimum qualification should be the Matriculation of the University, but the I. Sc.'s should be given the preference, and I fear that within a very few years the classes would be filled up with I. Sc. and B. Sc. students.

For the *Tols*, the minimum qualifications should be fixed to the *Ādya* and *Madhya* examinations of the

Sanskrit Board. Then they will be able to follow the Āyurvedic Texts which are, as a rule, written in classical Sanskrit.

16. *Accommodation for students in medical institutions.*— I have stated above that the medical institutions are overcrowded. To support this statement I cannot refrain from quoting the Questions and Answers in the local Legislative Council :

Question 10. Mr. J. N. Maitra wanted to know

(a) whether large numbers of candidates for admission into the Calcutta Medical College, Carmichael Medical College and Campbell Medical School were annually refused admission owing to want of accommodation.

Ans. (a) Yes.

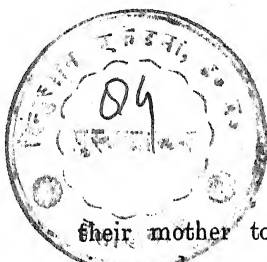
(b) Whether many candidates for admission into the Campbell Medical School possessed the qualifications necessary for admission into the Medical College.

Ans. (b) No, it is not strictly correct. At the last admission out of 237 I. Sc.'s admitted only 15 were First Division and 22 were Second Division men. The Medical College could fill their admission list with B. Sc.'s alone and Second Division I. Sc.'s have very little chance. The Campbell admits I. A.'s. The figures at the last admission were 9 First Division, 19 Second Division, and 4 Third Division—total 32. The Medical College does not admit I. A. candidates.

(c) If so whether the Government would raise the status of the Campbell Medical School to that of a Medical College at an early date.

Ans. (c) No.

17. *The medium of instruction in Bengal.*—The difficulty about the medium of instruction in Bengal cannot be solved easily. It is no doubt true that students will appreciate the lecturers if they impart instruction in



their mother tongue. It is undoubtedly a sad waste of time and energy in learning sciences in a foreign garb. All educationists now agree that the mother tongue of the students should be placed over foreign languages. The learner's attention would not then be diverted from the study of science to that of foreign languages.

We know with what good results the mother tongue has been employed for the moral and religious development of children. The Venerable Buddha delivered his sermons to his nation in its own speech,—Pali,—not even in Sanskrit. To learn a foreign language is difficult and certainly it is very inconvenient to express our ideas in another language which has little or no affinity with our mother tongue. But whether we like it or not, the Bengali students begin to learn English even from a very tender age, and when they grow older, I am sorry to remark, they like to express themselves in a foreign tongue. Considering all these facts, I hold that for the present, it is desirable that English language should be the medium of study in the college. It will bring the education of the students up to modern standard of method and efficiency, and will keep them in touch with European learning and progress. The lecturers, however, ought to be prepared to explain difficult questions in the vernacular.

I quote here the remarks of the Committee in their Report of 1834 as regards the medium of instruction and believe that the reasons set forth therein still hold good for the present time. "A knowledge of the English language we consider as a *sine quâ non*, because that language combines within itself the circle of all the sciences, and an incalculable wealth of printed works and illustrations; circumstances that give it obvious advantages over the oriental languages, in which are only to be found

the crudest elements of science or the most irrational substitutes for it."

But to bring the means of medical instruction within the reach of the masses, who are still for the most part ignorant of the English language, vernacular should be adopted as the medium of instruction. And it was for similar reasons that a Hindusthani class was opened for the education of the native doctors in 1838, with Urdu as the medium of teaching, and a Bengali class, in which the students were taught in Bengali, was added in 1851-52. The students who passed their final examinations from these institutions were known as native doctors who were employed for military and civil duties respectively. Thus there were opened Bengali classes in the Medical College of Bengal in 1852, and in the Medical School at Agra, vernacular was the medium of instruction which was imparted in accordance with European methods. Similar schools were opened at Lahore, Dacca, Hyderabad, Patna, Cuttack and many other places; but in most of these schools the medium of instruction has changed;—the vernacular has gradually yielded its place to English which is liked by the teachers and students alike. It may be laid down as a general rule that vernacular should be retained for the lower standard and the *Tols*, and English for higher examinations in the college. In the examinations, however, the students should be allowed to have the option of writing their answers either in the vernacular or in English, and this mixed system would be found to be educationally economical.

18. *Diplomas*.—The University Commission of 1917-19, it is true, did not deem it correct to establish degrees and diplomas in ancient systems of medicine with a view to authorise the recipients to undertake the practice of their profession. But it was admitted that careful

investigation of the science would throw light on its origin and growth. The report continues,—“If adequate provision is made for this purpose in the reconstituted University, it is not unreasonable to hope that the exponents of the indigenous system of medicine will gradually become linked with students trained according to the most approved Western method.”

Practically, there is scarcely any very marked difference between the Āyurveda and the modern scientific medicine. The Āyurveda is not a conservative system of medicine; we can distinctly trace its growth through the different strata of thought. We have abundant testimony,—the internal evidence of the medical books themselves,—that the Āyurvedic system often utilized new methods of treatment, but in a manner peculiar to itself. The treatment advocated in the *Vedas* differs from the treatment recommended by the Ātreya School of physicians; the system of Caraka and Dṛdhavala is not identical with the teaching of Agniveśa; the treatment of Caraka has undergone a complete change, and the treatment of diseases by mineral medicines is an advance introduced by the physicians of the Iatro-chemical School. Nāgārjuna redacted the *Suśruta Saṁhitā*. But the science of surgery finds no place in the hands of the learned kabirajes of the present time. Bhāva Miśra described some new diseases, *e.g.*, the Firanga roga or Syphilis in his work, but he referred for the treatment of the disease to the ancient Seers (Ṛsis) although the disease was not even mentioned by his predecessors. Opium, mercury, and arsenic were unknown, to the ancient physicians, or if known, were not commonly used by them; but the modern kavirajes can hardly treat cases without these remedies. It will come to you as a surprise that many Āyurvedic physicians now use quinine in malaria

but though they do not admit it, we should not be astonished to find in some tantras or purāṇas later on, the properties of the drug described in the form of a dialogue between Śiva and Pārvatī. It would be done so, not to cheat the public, but to create a faith in the minds of the patients; and we know that similar devices had been adopted in recent times by Europeans, when, in order to stimulate faith in vaccination, some Sanskrit poems were composed to show that vaccination was sanctioned by the religious books of the Hindus. In the system as practised now-a-days, many medicines from the Unani system have found a permanent place in the Āyurvedic materia medica. We should always bear in mind the famous couplet of Caraka :

“That alone is the right medicine which can remove
disease;
He alone is the true physician who can restore health.”

In a note on the Sanskrit College, Jeypore, dated the 28th October, 1894, which appeared as an appendix to Dr. Hendley's article on “*The Indian System of Medicine and the Lesson that may learned from them*” (*vide Transactions of the First Indian Medical Congress, 1894*). Mr. Kalipada Banerjee, the then Principal of the Jeypore College writes: “The titles conferred here in the medical examinations are Bhisak at the Upadhaya, Bhisagvara at the Sastri, and Bhisagacharya at the final examination. But the titles conferred in Bengal are Kaviraja, Kavirajan (kaviranjana ?), Kanthabharana, and Dhvanantari; and in the N. W. Provinces Vaidya, Vaidyaraja, and Vaidyachuramani. I must mention in this connection that nowhere besides Jeypore Hindu medicine is systematically taught in the College; and everywhere the science is taught privately by distinguished native vaidas.” “The medicine is nowhere taught in India in

the vernacular, medical education being everywhere given entirely in Sanskrit." In the Punjab University, the titles of Vaidya Vachaspati and Kaviraja are conferred. Any of these titles may be selected for the students who pass their examinations from the *Tols*.

But the students who successfully pass the final examinations of the Colleges should get titles which may indicate that they are qualified medical men entitled to practice Medicine, Surgery and Midwifery. They may be designated Indian Physicians or Surgeons, or Āyurvedic Doctor or similar titles. The Homeopaths without any pretensions to medical education often add such titles as M. B. and M. D. Any title similar to M. B., B. S. or L. R. C. P. might be granted to these trained medical men.

19. *The present condition of the Āyurvedic literature:* For the present state of the Sanskrit literature of Āyurvedic medicine, I would refer you to *Chapter I, Introduction*, on the "*Ancient Medical authors and their works*" in *Vol. I* of my thesis on the *Surgical Instruments of the Hindus*, and also to the *History of Indian Medicine*, which is in course of publication by the University. The literature is poor in scientific subjects. Many books still exist as manuscripts, and only a few have been edited and printed. But it is not difficult to edit books which may serve as suitable text books for the students of the proposed college. New books can be written in easy Sanskrit, Vernacular or English. There are books on materia medica and medicine which may serve as text books for students if brought up to date by new editions in which descriptions of new diseases and their scientific treatment are incorporated.

Memorandum of Sanskrit medical works generally studied by an educated Kabiraj of the present days:

At Jeydur Sanskrit College the following books form the curriculum of studies :

“ At the Upadhyaya (Proficiency) Examination in Ayurveda (Medical science) the following are the text books :

Nidan, the great work on the diagnosis of diseases, by Madhava Acharya (?), better known as Madhava Kara.

Narivijnan, a tract on feeling pulse, by Nam Chandra Das.

Bhavaprakas, a later compilation of medical works, by Bhava Misra.

Paribhasapradipa, a book on Hindu Materia Medica, by Govinda Sen.

Chikitsa Sara Sangraha, an ancient compilation from Charaka and Susruta, by Chakradatta.

Rasamanjari, an elementary treatise on Chemistry, by Basli Nath.

At the Sastri (Honours) Examination the text books are :

Bhavaprakas, as at the Upadhyaya Examination.

Astangahridaya, a work on the diseases of the heart and the whole body (*lit.*, the heart of the Octopartrite Science), by Bagbhata.

Susruta Sanhita, Chapter on the body.

Charaka Sanhita, Chapters on treatment.

Rasendra Sara Sangraha, a work on Chemistry, by Gopalkrishna.

At the Acharyya (Final) Examination, the text books are :

Susruta Sanhita.

Charaka Sanhita.

Astangahridaya of Bagbhata.

Bhaisajya Ratnavali, a modern Hindu pharmacopoeia.

Rasendra Chintamani, the best work on the chemical or mineral drugs, by Ram Chandra.

I may add here that these are the Sanskrit medical works generally studied at Calcutta, Benares, and other parts of India. There are besides these many other famous works, but they are not in much use at present."

Manuscripts of Sanskrit works on medicine still lie scattered in the country. These MSS. may be collected, edited and published by the learned editors under the auspices of the Government, Societies and also private enterprise. Many such works are being printed in the Āyurvediya Granthamālā, in the Anandasram Series, and other publications from Bombay, Poona and Calcutta. There are also signs of an awakening amongst our countrymen, and we find a few graduates of our Medical College writing books on the science and have devoted themselves in the improvement of the Āyurveda.

20. *The present status of the Āyurvedic practitioners :* The vaidas are still honoured in this country. The learned Kabirajes demand fees for their visits like the doctors of the modern schools, and the public do not grudge to pay them. This method of receiving fees is certainly an innovation for it was the practice in former times to receive gifts from patients after they were cured, especially on the day when the patient was allowed to eat his normal diet. The sale of medicines by means of advertisements, which they often do, is certainly not to be encouraged, if not prohibited.

There are certain disadvantages from which they suffer. But these disadvantages are the result of their inactivity and ignorance: as for instance, their attitude towards Surgery. At present there are many Kabirajes in affluent circumstances but they take little or no interest in the improvement of their science. They never think of the debt they owe to the science they practise. Recently some colleges have been started, but these institutions are more

or less of a proprietary nature and there is scarcely any certainty that any of them would last long after the death of their Founders. Already there are signs, not of healthy rivalry, but of obstructive hostility between them. Anyhow there is no likelihood in the near future of imparting knowledge in Surgery to the students of Āyurveda, and the voids of the present day may justly be compared with "a bird with but one wing." Suśruta says: "Only the association of medicine with surgery forms the perfect physician. The Physician who is deficient in the knowledge of one of these branches resembles a bird with but one wing."

Certificates :—Many Kabirajes, for whose learning and skill as a practitioner of the healing art, I entertain profound respect, have expressed their sorrow at the attitude of our Government in not recognising the certificates issued by them to their patients who had been under their treatment. Such an attitude of the Government has caused results which are far from desirable. The public have been forced to resort to uncanny practices in which even the qualified practitioners are known to have taken part. To take a concrete example: a clerk in an office becomes ill. Perhaps he lives in a village where qualified practitioners are not available, or if available, their services cannot be secured on financial grounds. A kaviraj practices in the village, and the clerk naturally calls him for treatment. He applies for leave on medical grounds. As usual a certificate from a registered practitioner is wanted by the officer in charge of the office. The clerk informs him about the true state of things. The officer demands from him in reply that under the rules, a certificate from a qualified practitioner is absolutely necessary to procure leave on medical grounds. What the clerk does next is well known to all. The dignity of the profession of medicine

suffers in the end. There is no law in India to prosecute a quack, and it is necessary to protect the public by training these kabirajes and recognise them, if they pass the test, as qualified medical men.

Registration: There should be a list of qualified kabirajes in Bengal. When trained according to scientific methods, their certificates to patients should be recognised. For the present, the learned physicians should be entrusted with the power of granting certificates, for amongst them we find men whom the Government have bestowed the highest Honours for their professional attainments, such as Mahāmahopādhyāya, Vaidyaratna, etc.

1. *Proper protection, collection and sale of drugs:* The Government should establish a Therapeutic Garden where the medicinal plants should be grown, and where the students should be taken to study the plants and recognise them. A trained Botanist should be in charge of such a garden, and a learned Kabiraj should take charge of the drug store, the main object of which would be to take proper protection, collection, supply, and sale of the certified drugs to different centres, to be established in the different districts of the Province. A Garden of Medicinal Plants and a Materia Medica Museum should be started for the proper identification of all medicaments of vegetable origin. A Chemist should be appointed for the preparation of mineral medicines. At present, it is difficult to secure reliable medicines, and it is highly desirable that medicinal agents should be supplied from a well organised drug store under Government control or supervision.

22. *Standardisation of drugs:* For the present crude drugs may be used as the kabirajes do it now;

but standardisation must be gradually introduced in the preparation of medicinal products. The kabirajes are not hostile to improvements; they are now selling their medicines in tablet forms.

23. *The sale of drugs*: The cost of medicines in the Āyurvedic system is decidedly less than that of medicines used by the doctors. And the cost may be reduced if a central organisation be started for supplying crude vegetable and mineral drugs to the medical men under State supervision. The cost of maintaining such an establishment would be satisfactorily met from the profit realised from the sale of drugs, if manufactured on a commercial scale. As examples of successful business in the shape of a druggist's store, I may mention the Sakti Pharmacy of Dacca, Jhandu Pharmaceutical Works, Kalpataru Ayurveda Bhavan, Messrs. C. K. Sen and Co., Ltd., and other firms dealing with Āyurvedic medicines.

The recent world-war has taught us a lesson. We have been reminded of our utter helplessness in getting a supply of medicines from Europe. The cry for imported drugs has abolished the trade in indigenous medicine, the well-tried and efficacious drugs of our country. The formation of a Drug Manufacturing Committee to investigate the possibilities of cultivation of medicinal plants in India and manufacture of drugs from them on a commercial scale is a move in the right direction; and if it be successful, there will be no lack of private enterprise to undertake its manufacture. The Cinchona plantation and the manufacture of Quinine tablets in the Reformatory Jail, Alipore, are instances of successful enterprise that has enriched the State, and at the same time benefitted the poor inhabitants of the country.

24. *The duties of the Local bodies,—University, Municipality, District Boards.*—It is the duty of the University to do something to stimulate the proper study of the indigenous system of Āyurvedic medicine. There is scope for study and research by medical students, in the investigation of the empirical truths which have proved beneficial for centuries, by scientific methods. But in the University of Calcutta nothing has been done to stimulate such researches. In the list of endowments, there is no donor for the Āyurvedic studies. There have been Lecturerships, Readerships and Professorships in the varied branches of learning. I am the last person to minimise their importance; but I am sorry to remark that, besides what the Government have done for the western medical science, the University has taken no active interest for cultivation of knowledge in medicine, far less in the medical studies of the indigenous system;—a system which is still believed, and followed by the innumerable inhabitants of the country, and is still doing an amount of good to the suffering humanity. That the teaching of Āyurveda is not incompatible with the ideals of University, has been shown by the University of Punjab which has an Āyurvedic Board and which grants diplomas to the successful students. If the premier university failed to take the initiative, let a Board of Studies in Āyurveda be formed in the Calcutta University without further delay and there are many Fellows of the Senate who are eligible to be its members. I do not think that the study of the Āyurveda is less interesting to, or has less claim on, the Senators than any other study which has a board for it.

The Municipalities and the District Boards should open Āyurvedic dispensaries for the treatment of the poor

people. The cost incurred would be less than that of similar institutions under Government control. In the dispensaries should be employed one or two apprentices who will help the Kabiraja in his pharmaceutical preparations and in serving his prescriptions. These dispensaries will not only be the means of affording relief to the sick, but will be instrumental in disseminating medical knowledge among the masses. It must be clearly remembered that I would not for a moment think of transplanting the indigenous system in the place of the Western science which has done so much good in the past and which is destined to do more in the future. My object is to give the Āyurvedic physicians a scientific training. Allow me to quote the words of Suśruta: "The ignorant physicians are allowed to exist and practise their profession from carelessness of the King."

156, Haris Mukerjee Road,
Bhowanipur, Calcutta.
Dated the 25th Sept. 1923.

I remain, yours faithfully,

(Sd.) GIRINDRA NATH MUKERJEE.

ĀYURVEDIC COMMITTEE, BENGAL.

*Oral evidence by Dr. G. N. Mukerjee, B.A., M.D.,
F.A.S.B., dated the 6th November, 1923.*

Answers to the questions put by Dr. M. N. Banerjee,
M.R.C.S. (Eng.), L.S.A. (Lond.), C.I.E., the
President.

Q.—What do you mean by the word ‘literary’ in the sentence “The traditional system of training of Kavirājes which has lasted for many centuries in Bengal has always been exclusively literary in character” (para. 3, p. 14) ?

A.—They learn the science of medicine from the text books, and the teachers explain those subjects in detail. The students do not get much of practical training. Only in the preparation of mineral medicines they have to do practical work. These text books contain scientific facts.

Examples :—(1) *The development of the fetus* has been described by months and these statements have been recorded since the Vedic times (*Garbha-upaniṣad*). But all along the same story is repeated in all the books, and the teachers teach the students according to these books. But these facts are never shown practically to the pupils nor do they corroborate the truth of these statements by observation.

(2) *Surgical operations*.—It is distinctly laid down in the *Suśruta Saṁhitā* that in case of boils, it must be opened by the knife, or cauterly, or fire ; and it is mentioned that if a doctor does not open a boil if there be pus in it, then he is considered as ‘candāla.’ Also there are mentions about application of ointments, etc., prior to

operations. But the students are taught the local applications only and not the practice of surgical operation.

Q.—Do you think that they are accurate descriptions?

A.—With the knowledge of the Western science, I think, we may find them to be fairly accurate and to contain many true facts and observations.

The barbarians who burned the famous library of Alexandria are called by us fanatics, but I think they were sincere; they believed the Koran to be the only book that contained truth, and as they had it, it was useless, they argued, to allow the library to stand as the books in it, as they were not Korans, contained no truth and so must be destroyed. If the Āyurvedic books are rubbish it is better to burn them for there is no truth in it, but if there is any Koran it should be allowed to live and be studied.

Q.—What is the history of medical education in Bengal?

A.—*Vide* Dr. Mukerjee's paper, para. 4-7, pp. 14-18.

Q.—How was the Āyurvedic system taught in those days?—when was it taught in the Sanskrit College?

A.—The following information has been received from the grandson of Pandit Madhusūdan Gupta. Madhusūdan was a student of the Sanskrit College. His teacher, Pandit Kṣudirām Biśārād had an abscess in the ear and took leave. Then Madhusūdan became the teacher. He used to dissect small animals. It is not a fact that Madhusūdan did the first dissection. Dissection of animals used to be done in the Sanskrit College. The Āyurvedic teaching was a part of the Sanskrit study; the course was for two years. Pandit Naba Kumur Gupta was another teacher of Madhusūdan in Āyurveda.

Q.—What is 'Native Medical Institution'?

A.—The Government first started a separate institution in 1822 long before the Medical College was established. They used to train ordinary apothecaries in Urdu or Bengali for state emergencies. In 1835 Government ordered abolition of the school (see Dr. Mukerjee's paper). They had it from 1822 to 1835.

Q.—What did Madhusūdan do when he was transferred to the Medical College ?

A.—The information is not complete whether he taught the Āyurveda or began to learn the Western science. He learned English from David Hare. Hare, Bethune and Madhusūdan were friends. His son was one of the first ten students of the Medical College. His name was Gopal. The students had a superficial knowledge of English ; scholarship was awarded to each, and books and dissecting cases were provided. Bethune presented the Pandit's portrait to the Medical College.

Q.—Were there two classes in the Medical College ?

A.—When Madhusūdan came to the Medical College, the students of the Āyurvedic class in the Sanskrit College divided themselves into two groups—one came with Madhusūdan and the other did not. When he entered the dissection hall, most of his students fled. I think that the first batch of students in the Medical College got a mixed training,—training in the Āyurvedic and Western science. Anatomy was studied with the help of dry human bones and dissection of goats. Then gradually the Western system was introduced.

Q.—What is the origin of the Military Assistant Surgeons ?

A.—At first in the Native Medical Institution the Indians (especially Mahomedans and Hindusthanees) used to get the training. With the establishment of the

Medical College the Anglo-Indians began to get their training in the Medical College and formed the Military Assistant Surgeons.

Q.—What is the utility of the Ayurvedic study ?

A.—Summary of pages 67 to 157 of Mukerjee's book *History of Indian Medicine, Introduction*—about the utility, restoration and development ; I have dealt there with the origin of medicine, some obsolete customs, about therapeutic measures, *e.g.*, massage, hypnotism, exercise, and diseases, such as identity of cholera, small-pox since the old days.

Some of the facts mentioned in the original works are not so popularly taught and spoken of because the teachers in these day, lecture on the subjects which they like best (pharmacy, materia medica, medicine), and not all the subjects (surgery, midwifery) which are in the *Āyurveda*.

Q.—Who were the Native Doctors ? Why did the native doctor die long ago ?

A.—Because the graduates of the Medical College came out, and it is a fact that the better qualified seniors always try to oust the juniors and less qualified medical men in practice.

Native doctors.—Before the establishment of the Medical College and Native Medical Institution, it was customary to employ Indians as subordinates in hospitals superintended by British Surgeons to carry out their instructions. Gradually these subordinates acquired skill and experience in medical science and were called "Native Doctors." They were recognized by the Government as such and were ordered to be attached to regiments and civil stations. They acted as compounders and dressers and had to undergo examinations, before they were entitled to higher status. They formed the 'third class' of

native doctors. In 1822, the Calcutta Native Medical Institution was established to carry on a better and uniform system of education in medical sciences. Jameison, Breton and Tytler were Superintendents of this school. An excellent class of native doctors—the second class—was the result. They were employed in the army and civil stations.

In 1835 this Institution was abolished and the Calcutta Medical College was established “for the instruction of native youths in the various branches of medical science, through the medium of the English language. The passed students were to receive certificates allowing them to practise medicine and surgery and were to receive pay as native doctors. In June, 1838, the demand for native doctors in the army was great, and the reply of the Council to the Government demand was “that the college in its present state, is not likely to afford a supply of subordinate medical officers to the native army. That the duties of the native doctor, and his pay, are incommensurate to the education given in the college.” It was then resolved by the Government that students of this college should, on passing their examination, receive the title of Sub-Assistant Surgeons. They are now known as Assistant Surgeons.

A secondary or military class was then formed for the instruction of native doctors through the medium of their vernacular. They were required to live in the college precincts and to be amenable to military law.

In 1847-48 regulations were drawn up for the education in the college of pupils for the European subordinate medical department. The students on passing their examinations, used to furnish Apothecaries and Stewards to the hospitals of European troops.

In 1851-52, the establishment of classes for the education of Bengali native doctors was added to the

secondary class. The students, after passing their examination, were employed in jails and civil stations of lower Bengal. The students who were successful in their examination were also called native doctors. The Bengali class developed afterwards into a separate school—the Campbell School in 1875. The students, on passing their examination from this school had been known as Hospital Assistants. They are now styled as Sub-Assistant Surgeons.

Q.—Do you think that teaching in Bengali or English would make any difference ?

A.—The students like to study medicine in English. At first training was given in English and Bengali in the medical schools but gradually the English came into use because the students liked it better than the Bengali. Really the students find that the English books are easier to learn and the Bengali synonyms of scientific terms are very difficult sometimes. In the case of the Āyurvedic medical schools they would not have so much difficulty as with the western school for in the first case they will have to deal with one class of students.

Q.—Would you sacrifice the advance of Bengali by imparting training in English ?

A.—No—for the present only ; so long as there are no good books or translations in Bengali. Only up to that time they will be taught in English. When good Bengali books will be available then they will be taught in Bengali. Mādhavakar's *Nidāna* is a good book. It has also been recast. The final medium of training would be Bengali.

In his address to the students of the Medical College of Calcutta, Professor Sir William O'Shanghnessy said "The progress of the principles of Normal and Vernacular Education cannot now be checked. These facts have deprived the Anglo-vernacular party of even a pretext for advocating the exclusive use either of English or

of the learned native tongues. Let those who wish well to India, and desire to see its inhabitants flourish in knowledge, visit the secondary schools of the new Medical College, and they will see the first fruits of the Normal system. I have felt it an imperative duty to publish these important facts."

When the Orientalists and the Anglicists were fighting to determine the medium of instruction of Indian youths, the celebrated scholar Mr. Hodgson cherished equal doubts about the fitness of the Sanskrit, the Arabic and the English languages as the medium of studies for the various nationalities and races which inhabit India. Dr. Wilson in 1838 remarked—"Mr. Hodgson's advocacy of the vernaculars is most powerful and convincing. They must be the medium of the regeneration of India, as they have been such of every country on the face of the globe."

Q.—Why do you say that most of the methods of treatment are "empirical" ?

A.—This is the idea of the people taught in the western science. All the teachings of the Āyurveda cannot be accidental; they must have been founded on facts, experiments and experience. But nowhere are given reasons for the facts, *e.g.*, salt-free diet in ascites and liquid diet in typhoid. They have only described the facts in *sutras* and the commentators and teachers only dilate these facts to the students.

Q.—What is your idea about the text books ?

Paragraph 10 (6), page 22—"the text books require to be recast, etc." (*vide* Dr. Mukerjee's paper).

A.—The teachings of the modern sciences must be incorporated with the teachings of the Āyurveda; If there is anything in the Āyurveda that does not corroborate scientific facts, it must be discarded.

Q.—Are there any Botany, Biology, Physics, Chemistry in the Āyurveda ?

A.—From the following it will be seen that biology was taught in the Āyurveda in the olden times :

Jivaka was a student in the University of Taxila. When he finished his studies he wanted a certificate from his teacher. His teacher ordered him to go and examine the plants which were within a few miles of that University and to note all the plants that were of any medicinal importance. After inspection he reported that there was not a single plant which had not had some medicinal property.

In the *Atharva Veda*—there are mentions about various worms. The description of the worms given by the Ṛṣis are exactly the same as given by the writers of the present age. Strange it is that the Ṛṣis in their description made the same sort of mistakes, as were done at first, by the early writers of the western science. I would refer you to my book "*Human Parasites in the Atharvaveda*." There are no separate text books of Biology, Physics, Chemistry, etc.

Q.—What are the subjects which have distinctive characters in the Āyurveda ?

A.—Medicine and Materia Medica. The text books on Biology, Physics, Chemistry, Anatomy and Physiology may be written on the model of the Āyurveda with the addition of facts from other sciences.

Q.—You say that there ought to be a Central College, etc. (*vide* Mr. Mukherjee's paper, paras 11-15)—Why ?

A.—If an Āyurvedic College be established and recognised by the Government then the old Kavirajes who had a different training in the *Tols* shall have great difficulty in their practice. So there ought to be a separate

system of teachings for those Kavirajes to give them some idea about modern advancements.

Q.—The scheme that you have given is too expensive. Can you curtail it ?

A.—Yes, the scheme is expensive but you cannot get good men for anything less than the amount. But you can get some good men who will be glad to do honorary work.

Q.—What is the nature of the Āyurvedic teaching that is given by the Punjab University.

A.—See Calendar of the Punjab University.

Q.—How will the District Board be a source of teaching to the mass ?

A.—They will get training as apprentice—and only practical training like that of the compounders.

Question asked by Mahāmahopādhyāya Gananāth Sen.

Q.—In case the Government is unable to start a Government Central Āyurvedic College, under the present financial condition, do you think that a suitable subsidy to an existing Āyurvedic College would suffice for the proper teaching of the Āyurveda ?

A.—I want a thoroughly equipped model institution maintained by the Government. But if the Government is unable to start such an institution immediately, then any of the existing institutions may be subsidised, provided the subsidy is sufficient to bring it to the standard of a model institution.

Q.—What would be proper control that Government would exercise ?

(a) If the College be a Government one—there should be a board to manage the working of the College. In the Board members will be nominated by the Government from Government officials, from Āyurvedic practitioners, from doctors and from laymen. It should not be maintained and managed like the Calcutta Medical College.

(b) If it be a subsidised College—the College must be a public institution—there should be one Government official, the other members will be from the doctors, kavirajes and laymen.

The internal management of the College will be in the hands of the Principal.

Q.—If proper arrangements are made for the teaching of the Āyurvedic medicine up to the required standard, should the University grant degrees and diplomas for Āyurveda to the regularly trained students ?

A.—Yes. I think it is the duty of the University.

INTRODUCTION

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REPORT OF AYURVEDIC COLLEGES AMALGAMATION SPECIAL COMMITTEE.

Preface.

In April, 1924, the Principal of the Baidyasastrapith applied to the Corporation for (1) a capital grant of Rs. 25,000, (2) a recurring annual grant of Rs. 10,000 and (3) a plot of rent-free land measuring not less than 3 bighas for the erection of a College and Hospital. The Public Health Standing Committee of the Corporation on the 23rd May, 1924, referred the matter to a Sub-Committee. The Sub-Committee inspected the various Ayurvedic Institutions, and the first question that struck them was whether it was not desirable and necessary to start a really efficient Ayurvedic College in Calcutta for the promotion of Ayurvedic learning. They were further prompted to raise this question by the fact that there were such institutions in other parts of India and they particularly referred to the Ayurvedic College in Madras. They communicated with the Principal of the Ayurvedic College, Madras, the Madras Corporation, the Bombay Corporation, the Poona Municipality and the Principal of the Delhi Tibbi College of Science with a view to ascertain their views. They consulted the authorities of the existing three Ayurvedic Colleges in Calcutta, viz., the Astanga Ayurvedic College, Baidyasastrapith and the Govinda Sundari Ayurvedic College and invited them to attend their meetings with a view to help them in their deliberations and to consider whether the different Ayurvedic Institutions could be amalgamated into a first-class Ayurvedic College. From the discussions the Sub-Committee had with the authorities of these institutions, they gathered that they were all willing to amalgamate provided the Corporation took the necessary steps in the matter. The Public Health Standing

Committee discussed the matter threadbare at two of their meetings, agreed with the Sub-Committee in their views and strongly recommended as follows :—

(1) That the support of the Corporation be extended to the Ayurvedic, Unani and other indigenous system of medicine and treatment.

(2) That the question of grant to a new Ayurvedic College having regard to the views expressed by the authorities of the three existing Ayurvedic Colleges and other eminent gentlemen interested in the promotion of the Ayurvedic system of medicine and treatment, the Committee are of opinion that in the existing state of things, it is highly desirable that the three existing Ayurvedic Colleges of Calcutta, *viz.*, Astanga Ayurvedic College, Baidyasastra Pith and Govinda Sundari Ayurvedic College should be amalgamated and that a really efficient Ayurvedic College should be started in Calcutta with a well-equipped Ayurvedic Hospital and Outdoor Dispensary and a Herbarium under the management of a representative Ayurvedic Board to be registered.

Appointment of the Special Committee and their recommendations.

The Corporation at their meeting held on the 4th September, 1924, accepted the

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| <ol style="list-style-type: none"> (1) Dr. Sundari Mohan Das. (2) Dr. B. C. Ghose. (3) Babu Jogesh Chunder Sen. (4) Babu Sukumar Ranjan Das. (5) Babu Ramaprosad Mukhopadhyaya. (6) Kaviraj Shanadas Bachaspati, Principal, Baidyasastrapith. (7) Kaviraj Shib Nath Sen. (8) Dr. Amiya Madhab Mallik. (9) Dr. Pramatha Nath Banerjee. (10) Dr. Grindra Nath Mukerjee. (11) Dr. K. S. Roy. (12) Mahamahopadhyaya Gananath Sen, President, Ayurvedic Sabha. | <p>recommendations of the Public Health Standing Committee and with a view to give effect to the proposal appointed a Special Committee constituted as shown in the margin to frame a detailed scheme for an amalgamated Ayurvedic College and a constitution</p> |
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- (13) Kaviraj Jamini Bhushan Roy, Principal, Astanga Ayurvedic College, for the said Ayurvedic Board. The Special Committee have held 12 meetings. At the 1st meeting
- (14) Kaviraj Ram Chandra Mullick, Principal, Govinda Sundari College.

held on the 13th November, 1924, Dr. Pramatha Nath Banerjea, M.L.C., was elected President of the Committee. Mahamahopadhyaya Gananath Sen, President, Ayurvedic Shabha, Kaviraj Shamadas Bachaspati, Principal, Baidyasastrapith, Kaviraj Ram Chandra Mullick, Principal, Govinda Sundari College and Kaviraj Jamini Bhushan Roy, Principal, Astanga Ayurvedic College were requested to send their suggestions for a scheme for an amalgamated Ayurvedic College and a constitution for an Ayurvedic Board with a special reference to the following points:—

(1) Constitution, (2) Location, (3) Name of institution, (4) Equipment including, (a) College, (b) Hospital, (c) Herbarium and (d) Miscellaneous, (5) Scope of studies, (6) Funds, and (7) Existing arrangements of each of the institutions.

The Committee further agreed that they would consider any scheme submitted by any other member of the Committee in this connection.

Mahamahopadhyaya Gananath Sen and Kaviraj Jamini Bhushan Roy submitted a joint scheme and Kaviraj Ramchandra Mullick and Kaviraj Shamadas Bachaspati submitted their schemes separately touching on all the points referred to above. No other scheme was submitted by any other member of the Committee. It would appear from the schemes submitted that the authorities of the three institutions are sincerely in favour of an amalgamation. They have also assured the Committee that they would abide by their decision in every matter in this connection. The Committee have carefully gone into the schemes submitted, have discussed the various points raised therein and have

considered all matters ancillary thereto. They beg to submit the following recommendations to the Corporation :—

(1) *Amalgamation*.—The three Ayurvedic Colleges, *viz.*, the Astanga Ayurvedic College, the Baidyasastrapith and the Govinda Sundari Ayurvedic College be amalgamated.

(2) *Name of the Institution*.—The amalgamated College be named "The Ayurveda Mahavidyalaya."

(3) *General Society*.—The Committee agreed that there should be a Society and that any person having sympathy with the objects of the society should be eligible to be a member of the Society.

That for the purpose of amalgamation, all members of the Institutions namely Baidyasastrapith, Astanga Ayurvedic College and Gobinda Sundari College, should be eligible to become members of the Society in accordance with the Rules and Regulations.

(4) *Governing Body*.—That there should be a governing body for the purpose of carrying on the work of the amalgamated college and hospital according to the rules and regulations for the time being in force and the resolutions of the Society.

(5) *Provisional Ayurvedic Board*.—That for the first year there should be a Provisional Ayurvedic Board for the purpose of organising the amalgamated college and hospital and conducting the affairs of the institution. The Provisional Board should be constituted as follows :—

(a) Each of the existing three colleges should elect 3 members	9
(b) The Special Committee should elect—			
(i) 3 eminent Kavirajes not connected with any of the existing colleges	...		3
(ii) 6 members from the general public	...		6
(c) The Corporation to nominate 3 members	...		3
		Total	21

(6) *Office Bearer.*—For the present there should be the following principal office-bearers :—

- (i) The President of the Board.
- (ii) The Rector of the College.
- (iii) The Principal of the College.
- (iv) The Secretary or Secretaries to the Board.
- (v) The Superintendent of Hospital.

That the Principal of the amalgamated college should be a paid officer and should devote his whole time in the work of the college.

That the Principal should be appointed by the Provisional Ayurvedic Board.

That Kaviraj Shamadas Bachaspati should be President of the Provisional Board.

That Mahamahopadhyaya Kaviraj Gananath Sen should be Rector of the College.

That Kaviraj Jamini Bhushan Roy and Ram Chandra Mullick should be the Joint Secretaries of the College.

That Kaviraj Shibnath Sen should be the Superintendent of the Hospital and that the post should be honorary for the present.

(7) *The Corporation Contribution.*—Having regard to the schemes submitted by Kaviraj Shamadas Bachaspati, Mahamahopadhyaya Gananath Sen and Kaviraj Jamini Bhushan Roy, the Committee are of opinion that about 5 bighas of land would be required for the amalgamated College and Hospital. The capital expenditure for buildings and equipment would be about Rs. 3 lakhs and annual recurring expenditure would be in the neighbourhood of Rs. 60,000. They recommend that the Corporation should give a plot of land measuring about 5 bighas in a suitable locality in Calcutta for the amalgamated College and Hospital, contribute a lakh of rupees towards the cost of

the buildings and equipment and make an annual grant of Rs. 30,000 for maintenance.

(8) *Memorandum of Association and the Rules.*—The Memorandum of Association of the Society and the Rules are appended hereto.

(9) *Representatives on the Provisional Board elected by the existing Ayurvedic Colleges.*—The authorities of the existing three Ayurvedic Colleges have selected the following representatives on the Provisional Board :—

(i) The Baidyasastrapith.

1. Kaviraj Shyamadas Bachaspati.
2. Kaviraj Sarat Chandra Kabya-Byakaran-Sankhya-Vedantatirtha.
3. Kaviraj Bimalananda Tarkatirtha.

(ii) The Astanga Ayurvedic College.

1. Mahamahopadhyaya Kaviraj Gananath Sen, Saraswati, M.A., L.M.S.
2. Kaviraj Jamini Bhusan Roy Kaviratna, M.A., M.B.
3. Kaviraj Hem Chandra Sen, Bhisagratna.

(iii) The Govinda Sundari Ayurvedic College.

1. Maharaja Sir Manindra Chandra Nandy, K.C.I.E.
2. Maharaj Kumar Srish Chandra Nandy, M.A.
3. Kaviraj Ram Chandra Mallik, Kavya-Vyakaran-Sankhyatirtha. Sathdarsanacharya, Bhisakshatri.

NOTE OF DISSENT.

4th April, 1925.

To

The SECRETARY,

Corporation of Calcutta.

DEAR SIR,

I beg to acknowledge receipt of a copy of the Minutes of the Proceedings of the last meeting of the Special Committee appointed to frame a detailed Scheme for an amalgamated Ayurvedic College and a Constitution for an Ayurvedic Board, containing the Report as adopted by the Committee. As the Report is going to be placed before the Corporation soon, I would request you to place my note of dissent along with it before the Corporation.

1. We began our work as members of the Special Committee with the object that the proposed Ayurvedic College would be formed by the amalgamation of the three existing Ayurvedic Colleges, *viz.*, Astanga Ayurveda Vidyalaya, Govinda Sundari Free Ayurvedic College, and the Vaidya Sastrapitha. We tried our best for the desired amalgamation and we framed a detailed scheme for the amalgamated college. But for some reasons which would be apparent from the Extracts of the Proceedings of the Governing Bodies of the colleges concerned, amalgamation was not found possible. I do not blame anybody for their decision to which they arrived after mature deliberation; but as the amalgamation failed, the scheme formulated in our Report could no longer be called a detailed scheme for the amalgamated Ayurvedic College.

2. In the formation of a Provisional Ayurvedic Board, item No. 5 in the report, it was unanimously adopted that (b) the Special Committee should elect (i) 3 eminent **Kabirages** not connected with any of the existing colleges, (ii) 6 members from the general public. But no such election of the members took place, and we were obliged to send our Report incomplete. We were told that the Special Committee had not been entrusted with the power of election of the members by the Corporation, and consequently the 9 members were elected by the Corporation. Personally I do not think that any gentleman who is sympathetic to a particular college should be debarred from being appointed a member; but as we provided that the 3 colleges should select 3 representatives each, it was settled that members under 5 (b) should be selected from gentlemen not connected with the 3 existing colleges. But some of the gentlemen selected by the Corporation are connected with the Colleges mentioned above.

3. In the item No. (6), the principal office-bearers have been selected by the Special Committee, and names of gentlemen had been recommended for the posts. The representatives of the three colleges were also elected by the colleges, and the names of the gentlemen so elected had been accepted by the Special Committee. If the Special Committee had no power of election, the names of gentlemen elected for the principal offices should be deleted from the Report. Then our Report would consist of a scheme and a constitution of the proposed college and the provisional Board, and to be consistent throughout, no name should have been suggested. Either we should have elected the members according to our resolutions, or we ought to have ceased to nominate any. In fact, our recommendations for the

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principal office-bearers were made on the basis of the resolution 5. The result of the election (12 by the Corporation and 9 by the three Colleges) was that 21 members of the provisional Board had no voice in the election of the principal office-bearers. The office-bearers themselves expressed their doubts about the procedure adopted.

On all other points I fully approve the Report.

Yours faithfully,

(Sd.) G. N. MUKERJEE.

APPENDIX

Memorandum of Association of Ayurveda Mahavidyalaya.

1. The name of the Society shall be the "Ayurveda Maha-Vidyalaya Parishat."

2. The Registered Office of the Society shall be situated in Calcutta.

3. The objects of the Society shall be the imparting of Ayurvedic Education to students in a systematic manner, the advancement of the Ayurvedic science for the benefit of the suffering humanity ; and for the attainment of the aforesaid objects the Society may adopt any or all of the following means, namely :—

(a) To establish and maintain a College or Colleges and a Dispensary or Dispensaries, Hospital or Hospitals and construct, equip and manage such buildings, Lecture-rooms, Museums, Laboratories, Herbarium and Gardens, Libraries, Hospitals, Dispensaries, Hostels, Boarding Houses and other necessary buildings to be used in connection therewith and as adjuncts or as accessories thereto.

(b) Provide for the admission and treatment of in-door and out-door patients in the Hospital or Hospitals or Dispensaries which may be started or may hereafter come under the control of the Society.

(c) Provide for the moral training of students of the College in keeping with the best traditions of the country.

(d) Make and amend rules and regulations in connection with the management and control of the said College and hospital and other institutions that may be established or taken over by the Society and for the residence for the students and officers and servants and particularly in connection with the admission and conduct of students and regulation of studies.

(e) Encourage research in the Ayurveda and allied

sciences by grants from the funds of the Society or by the establishment of Fellowships, Scholarships, Prizes or Rewards and in such other manner as the Society may determine upon.

(f) Endow or establish Professorship, Lectureships, Readerships in the Ayurveda or allied sciences.

(g) Encourage systematic study of diseases and drugs according to Ayurvedic and if necessary modern methods.

(h) Grant Diplomas, Certificates of Proficiency, Medals, Scholarships, Free-studentships or Rewards to students of the College under such terms and conditions as the Society may think fit.

(i) Establish farms for the cultivation, distribution and supply to the profession of medicinal plants under such conditions as the Society may determine.

(j) Collect manuscripts and compile, edit, translate, print, publish, sell or help in the compiling, editing, publishing, printing and selling of books or journals, for the use of students, practitioners or the general public.

(k) Publish, circulate or sell or help in the publication or circulation or sale of a journal of a character specially adapted to the needs of the Ayurvedic science and for purposes of making Ayurveda better known amongst the people of the country and for purposes of creating general interest in Ayurveda.

(l) Publish, distribute or sell records of transactions and calendars of the Society and bulletins and reports of the work done in the Hospitals, Dispensaries and Laboratories connected with the Society.

(m) Consider the law of India and all questions affecting the Ayurvedic profession and adopt such measures from time to time regarding the same as may be deemed expedient or necessary.

(n) Purchase, take on lease or otherwise acquire, hold,

manage, let, sell, exchange, mortgage or otherwise dispose of movable or immovable properties of every description and all rights or privileges necessary or convenient for the purpose of the Society, and in particular any lands, buildings, furniture, household and other effects, utensils, books, newspapers, periodicals, instruments, fittings, apparatus, appliances, conveniences and accommodation and when deemed necessary or desirable in the interest of the Society, sell, demise, let, hire, mortgage, transfer, or dispose of the same.

(o) Invest the moneys of the Society not immediately required in promissory notes of the Government of India or any securities which are or may be authorised by any Act of Indian Legislature or by the High Court of Calcutta for the investment of Trust moneys.

(p) Assist, incorporate or co-operate with any other Society or Association whether incorporated or registered or not and having altogether or in part objects similar to those of the Society.

(q) Accept grants-in-aid from Government, or Indian States or Municipalities or other Corporate Bodies and enter into such arrangements with Government, or Indian States, or Municipalities or Corporate Bodies as the Society may think fit.

(r) Accept gifts and endowments on such terms as the Society may consider reasonable.

(s) Undertake and carry out the execution of any trusts which the Society may deem to be directly or indirectly conducive to its interests.

(t) Borrow or raise money by the issue of or upon bonds, debentures, bills of exchange, promissory notes or other obligations or securities of the Society or by mortgage or charge of all or any part of the property

of the Society and collect donations and subscriptions for the purpose of the Society.

(u) Establish, endow, contribute to, organise and manage provident or benevolent funds for the benefit or assistance of the staff employed by the Society and their families and dependants.

(v) Do all such other things as may be lawful, incidental or conducive to the attainment of the foregoing objects or any of them.

4. If at any time it is found advisable or desirable to discontinue the society, it shall be dissolved in the manner provided by the Societies' Registration Act (Act XXI of 1860) and its property and assets shall be given or transferred to some other institution or institutions having objects similar to the objects of this society in accordance with the provisions of the said Act, subject to the terms and conditions of any agreement which may be subsisting at the time with any donor or lessor.

RULES.

Constitution.

1. The Society shall consist of four classes of Members, namely, Life Members, Ordinary Members, Ex-officio Members and Honorary Members.

2. Any person making a donation of Rs. 500 or more to the Funds of the Society shall be entitled to become a Life Member.

3. Any person paying an annual subscription to the Society of Rs. 12 shall be entitled to become an Ordinary Member.

4. The Trustees, Professors and Lecturers and Visiting Physicians and Surgeons of the Maha-Vidyalyaya and the

Members of the Committee nominated by the Calcutta Corporation, shall be Ex-officio Members.

5. Any person of eminent position and attainments, who is specially interested in the objects of the Society may be elected an Honorary Member at a meeting of the Society on the recommendation of the Executive Committee. Such election may be for life.

6. Any person of eminent position who may take interest in the Institution and give substantial help to it, may, on the recommendation of the Executive Committee be elected a Patron or Vice-Patron at a meeting of the Society. Such election may be for life or for a definite term.

7. Any person above the age of 18 years may be elected a Member. Such person shall be duly proposed, seconded, and elected at a meeting of the Executive Committee.

8. If the whole amount of the Annual subscription of an Ordinary Member be not paid during the year for which it is payable and within six months thereafter, his rights of membership shall *ipso facto* be suspended. Thereafter, the Executive Committee may, after giving him at least one month's notice in writing, remove his name from the list of Members with effect from the 1st Baisak of the following year, or such later date as the Executive Committee may fix.

Meetings of the Society.

9. Meetings of the Society shall be called General Meetings. An Annual General Meeting shall be held every year not later than the last day of Baisak, at which the following business shall be transacted :—

- (a) To consider the Report of the Provisional Board and the Executive Committee for the previous year ;

- (b) To consider the audited accounts of the previous year and the balance sheet;
- (c) To pass the Budget for the new year;
- (d) To elect the office bearers for the new year;
- (e) To elect members of the new Executive Committee,
- (f) To appoint Auditors;
- (g) To transact any other business that may be brought forward by the Executive Committee or of which a week's notice in writing has been given by any member.

10. A Special General Meeting may be convened at any time by the Honorary Secretary of his own motion, and shall be convened by him at the instance of the President or of the Executive Committee. If the Honorary Secretary shall fail to call such meeting within 7 days after being requested to do so by the President or by the Executive Committee, the President or the Executive Committee, acting through any Member or Members authorized by them in that behalf, may call the meeting.

11. The Honorary Secretary shall call a Special General Meeting on receipt of a requisition signed by not less than 10 Members of the institution. If he shall fail to call such meeting within one week after receipt of such requisition, the requisitionists or any 10 of them may themselves call such meeting.

12. Seven Members shall form a quorum at a General Meeting of the Members.

13. If within half an hour of the time fixed for a meeting, a quorum is not present, the meeting shall, when it has been called by or at the instance of the Executive Committee or the President, or by the Honorary Secretary of his own motion, stand adjourned to another day and hour to be fixed by the Members there present, and the Members present at such adjourned meeting shall form

a quorum whatever their number may be. If, however, the meeting has been called by the Honorary Secretary on the requisition of Members or by the requisitionists themselves, it shall be dissolved.

14. At least 7 days' notice of a General Meeting shall ordinarily be given to each Member. The notice shall specify the place, the day and the hour of such meeting, and the nature of the business to be transacted at such Meeting. In case of an emergency, a General Meeting may be called on shorter notice.

15. The non-receipt or short service of a notice of any General Meeting or of any Meeting of the Executive Committee or of any Sub-Committee shall not invalidate the proceedings of such meeting.

16. Every question arising at a General Meeting shall, unless otherwise provided, be decided by a majority of votes of the Members present and voting on the question. In case of an equality of votes the Chairman of the Meeting shall have a second or casting vote in addition to his ordinary vote.

17. The President of the Society, when present, shall preside at all General Meetings. In his absence, the meeting shall elect its own Chairman.

18. The Society shall have ultimate authority in all matters relating to the institution except such as are expressly provided for in the Rules and Regulations.

Executive Committee.

19. The management and control of the property, business, and affairs of the institution shall be vested in an Executive Committee, who shall have full power to deal with all matters connected with the institution, subject only to the Rules and Regulations for the time being in force and the Resolutions of the Society.

20. The Executive Committee shall consist of not more than 17 members including the officers and they shall be elected or appointed as follows :—

- (a) 8 members to be elected by the Society at its Annual General Meeting ; provided that not more than two of such members shall be members of the staff in receipt of salary ;
- (b) 3 members to be elected by the Corporation of Calcutta ;
- (c) 1 member to be elected by the college staff of the Mahavidyalaya and 1 by the Hospital staff ; and
- (d) The Principal, the Rector and the Secretary or Secretaries of the Mahavidyalaya *ex-officio*.

If any vacancy occurs during the interval between any two Annual General Meetings, it shall be filled up by the body concerned.

21. The Executive Committee shall elect its Chairman every year. They shall ordinarily meet once every month to transact all necessary business. A Special Meeting of the Executive Committee may be called by the Honorary Secretary or the Chairman whenever he thinks it necessary and shall be called by the Honorary Secretary on a requisition made by not less than three members of the Executive Committee. Seven shall form a quorum.

22. The Executive Committee may from time to time, appoint Sub-Committees for the convenient transaction of the business of the institution.

The Chairman shall preside at every meeting of the Executive Committee. In his absence, the meeting will elect one of its members as Chairman.

Office Bearers.

23. The Society shall have a President, a Rector, a Treasurer, a Secretary or two Secretaries and a Superintendent of Hospital.

The Rector shall have power to guide the Principal in regard to all academic matters and supervise studies in the college in a general way.

The Principal shall be responsible for carrying on the academic as well as administrative business of the college and in particular shall be responsible for the maintenance of internal discipline in the college.

24. The Honorary Secretary shall have charge of the executive work of the institution. He shall keep the minutes of meetings, carry on correspondence, look over the accounts and records, superintend the collections and be responsible jointly with the Honorary Treasurer, for the due application of the funds of the Society. He shall be responsible for giving effect to the Rules and Regulations of the Society, and the resolutions of the Executive Committee and of General Meetings.

25. The Honorary Treasurer shall be the custodian of the moneys of the institution. He may delegate his powers in respect of the collection and expenditure of small amounts to any other Office-Bearer or to a Subordinate Officer, but such Office-Bearer or Subordinate Officer shall remain duly responsible to the Honorary Treasurer and the Executive Committee. The Honorary Treasurer shall furnish the Honorary Secretary with funds for meeting the current expenses of the institution and such other amounts as may be sanctioned by the Executive Committee. On emergent occasions, any absolute necessary disbursements may be made by the Honorary Treasurer, subject, however, to ratification by the Executive Committee at its next meeting. The Honorary Treasurer shall deposit all funds not required for current expenses in a Bank to be approved by the Executive Committee. All cheques on the Bank shall be signed by the Honorary Treasurer and the Honorary

Secretary jointly. In the absence of the Honorary Treasurer, the Executive Committee may entrust his duties to any other Office-Bearer.

Trustees.

26. The property of the institution shall be vested in Trustees, whose number shall not be less than three not more than five.

27. The first trustee shall be.....

28. The trustees shall hold office for life or until they resign their trusteeship in writing.

29. A new Trustee shall be appointed only at a General Meeting.

30. The Trustees shall have power, in pursuance of a resolution passed at a Meeting of the Executive Committee and confirmed at a General Meeting, to accept any gift, or hold any property, or sell, mortgage, transfer, lease, dispose of or deal with in any particular manner whatever, any property movable or immovable of the Society or acquire or take on lease any property.

In case of disagreement between the Society and the Board of Trustees on any matter it shall be referred back to the Society for reconsideration at a special meeting, whose decision shall be final and binding on the Trustees.

31. Any three of the Trustees may exercise all or any of the rights and powers of the Trustees under these Rules.

General.

32. The income and property of the Society, whence-soever derived, shall be applied solely toward the promotion of the objects of the institution as set forth in the Memorandum of Association, and no portion thereof shall be paid or transferred, directly or indirectly, by way of dividend, bonus, or otherwise by way of profit, to the persons who at any time are or have been members

of the Society or to any of them or to any person claiming through any of them. Provided that nothing herein contained shall prevent the gratuitous distribution among or sale at a discount to, Members or Subscribers to the funds of the Society or otherwise, relating to all or any of its objects, nor the payment, in good faith, of remuneration to any officers or servants of the Institution or to any Member thereof or any other person, in return for any services actually rendered to the Society.

33. An Office-Bearer, or a Member may be removed for good and sufficient cause by a resolution passed by a majority of three-fourths of the Members present at a General Meeting and confirmed at a subsequent General Meeting called within a period of not less than a fortnight and not more than two months after the first meeting.

34. The Executive Committee may frame regulations not inconsistent with these Rules, subject to ratification at the next General Meeting.

35. The Executive Committee may make suggestions for additions to or amendments of these Rules. Any individual member shall also have the power to propose any additions or amendments at a General Meeting of the institution, provided that due notice of such additions or amendments shall have been specifically given to the Honorary Secretary at least a fortnight before the meeting and the Honorary Secretary shall have circulated such notice among all the Members.

36. Additions to or amendments of, any of these Rules shall only be made by a majority of two-thirds of the Members present at a General Meeting. The Memorandum of Association shall not be altered or amended except at a Special General Meeting by the votes of three-fifths of the total number of Members on the roll, other than those whose rights have been suspended

under Rule 8, and confirmed by the votes of three-fifths of the Members present at a second Special General Meeting.

Transitory Provisions.

1. There shall be a Provisional Ayurvedic Board which shall manage and control the affairs of the Institution for one year from the date of amalgamation. This Board shall be constituted as follows:

- | | | |
|---|-----|----------|
| (a) Each of the existing three Colleges shall elect | | |
| 3 members | ... | 9 |
| (b) The Special Committee shall elect— | | |
| (i) 3 eminent Kavirajes not connected with the | | |
| existing Colleges | ... | 3 |
| (ii) 6 members from the general public | ... | 6 |
| (c) The Corporation shall nominate 3 members | | 3 |
| | | <hr/> 21 |

2. The first Trustees shall be elected by the Provisional Board.

N.B.—A copy of the report was sent to each of the Governing Bodies of the three existing Colleges for an expression of opinion. The Governing Bodies of the Baidyasastrapith and the Govinda Sundari Ayurvedic College have approved of the scheme framed by the Special Committee for an amalgamated Ayurvedic College, but the Governing Body and the Board of Trustee of the Astanga Ayurvedic College are of opinion that at present it is not desirable that the Ashtanga Ayurvedic College be amalgamated with the other two existing Colleges.

EXTRACTS FROM THE PROCEEDINGS OF THE MEETINGS OF
THE GOVERNING BODIES OF THE THREE COLLEGES.

*Letter from the Secretary, Gobinda Sundari Free Ayurvedic
College, dated the 13th March, 1925.*

With reference to your letter No. S-7025, dated the 7th March, 1925, forwarding, for an expression of opinion, a copy of the report of the Special Committee appointed by the Corporation to frame a detailed scheme for an amalgamated Ayurvedic College, I have the honour to state that the report was duly laid before the Governing Body of this College at their meeting held on 11th March, 1925, and an extract from the proceedings of the meeting is appended.

*Extract from the Proceedings of the meeting of Governing
Body of the M. C. G. S. Free Ayurvedic College
held on 11th March, 1925.*

Read letter No. S-7025, dated 7th March, 1925, from the Secretary to the Corporation of Calcutta with enclosures.
Resolved—

That the Corporation be informed that the Governing Body fully concur with the scheme framed by the Special Committee of the Corporation for the management of the amalgamated Ayurvedic College. Resolved further that their sincere thanks be conveyed to the Corporation for what they have done so far for the amalgamation of the three existing Ayurvedic Colleges.

*Letter from the Secretary, Baidya Sastra Pith (National
Ayurvedic College), dated the 14th March, 1925.*

Re AYURVEDIC COLLEGE AMALGAMATION.

With reference to your letter No. S.-7027, dated the 7th March, I have the pleasure to inform you that the report of the Special Committee forwarded with the

letter was placed before our College Council (Governing Body) on 12th instant for consideration and that the Council unanimously passed the following resolutions supporting amalgamation and the final report of the Committee and heartily thanked the Special Committee for their effort.

Resolved—

(1) That considering the present state of “Ayurveda” this Council is of opinion that all Kavirajes should leave aside all personal and sectarian interests and devote their energies for the uplift of Ayurveda.

This Council has already intimated its desire for the amalgamation of the three existing Colleges and it reiterates the same again and conveys its sincere eagerness for amalgamation and also tenders thanks for the efforts of the Committee for the last six months to bring about amalgamation.

(2) This Council while recognising that the proposed grant is not adequate, considers that there are one or two points in the report of the Special Committee which needs looking into but in view of the loss of time and resultant delay in starting work that will take place, requests that the report of the Special Committee be adopted.

(3) The Council understands that Mahamahopadhyaya Gananath Sen has informed the Special Committee at their last meeting that the three eminent Kavirajes nominated by the Corporation were connected with the Baidyasastra Pith and this action of the Corporation was contrary to the constitution of the Provisional Board.

The Council of the Biadyasastra Pith considers it necessary to inform the Special Committee that the three Kavirajes elected by the Corporation have no connection whatever with the Baidyasastra Pith and their names were put in on the assurance being given by one of the

members of the Council that they would help the Baidyasastra Pith by teaching the students of the College but as they did not agree to the suggestion, this fact was recorded in the letter of resignation submitted by them.

*Letter dated the 14th March, 1925, from the President,
Executive Council, Astanga Ayurveda
Vidyalaya, Calcutta.*

With reference to your letter No. S-7026, dated 7th instant, addressed to the Secretary of the Astanga Ayurveda Vidyalaya, I beg to state that I placed before the Governing Body and the Board of Trustees of my College a copy of the Report of the Special Committee appointed by the Corporation "to frame a detailed scheme for an amalgamated Ayurvedic College" for favour of their opinion and guidance.

The Governing Body and the Board of Trustees in a combined meeting held on 13th instant have expressed their opinion as follows :—

I. That this meeting of the Governing Body and the Board of Trustees of the Astanga Ayurveda Vidyalaya offers its heart-felt thanks to the Corporation of Calcutta for recognising that support of the Corporation should be extended to the Ayurvedic system of medicine.

II. That the Astanga Ayurveda Vidyalaya has been attempting the resurrection and growth of Ayurveda in all its eight branches, *viz.*—

- (1) Shalya or Surgery and Midwifery (together).
- (2) Shalakya or Surgery of the Eye, Ear, Nose, and Throat, etc.
- (3) Kayachikitsa or Practice of Medicine.
- (4) Bhutavidya or Treatment of mental diseases (including the so-called obsessions).
- (5) Kaumara-bhritya or Hygiene and Treatment of children.

(6) Agada-tantra or Diagnosis and Treatment of Poisons, vegetable, mineral and animal, including Snake-bite, Rabies, etc.

(7) Rasayana or Hygienic and Preventive Medicine for the attainment of longevity and rejuvenation in old age.

(8) Vajeeakaran-tantra or Sexual Science including sexual Hygiene and Treatment of Sexual diseases, and has adopted modern scientific methods where necessary for the said purpose and is not based on blind orthodoxy; but it appears that the two other Ayurvedic Colleges do not attach the same importance to the modern methods of scientific investigation; and in consequence, an amalgamation of Colleges which might hold fundamentally different ideas and ideals would not increase their efficiency.

III. That the proposed amalgamation of the existing Colleges although conceived in the best interests of the Ayurvedic Science, is not in the present circumstances likely to be conducive to its healthy growth.

IV. That this meeting is of opinion that at present it is not desirable that the Astanga Ayurveda Vidyalaya should be amalgamated with the Vaidya-Shastra Pith and Govinda-Sundari Free Ayurvedic College.

APPENDIX.

The Committee appointed by the Government of Madras on the indigenous medicines drew up the following Questionnaire :—

1. What is the division or divisions of the indigenous systems of medicine,—Ayurveda, Unani or Siddha—that you propose to deal with?

2. (a) What are the theory or theories of causation of disease according to your system? Please favour the committee with your views as to how far your theory or theories stand the tests of modern scientific criticism. (b) What are the principles and methods of diagnosis and treatment followed in your system? Please favour the committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible. (c) Do you hold that the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.

3. (a) Are you connected directly with any institution on indigenous lines? (b) Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of (1) adequacy of medical relief provided: (2) suitability as centres of medical education. If your answer is in the negative, please state in what respect you consider the existing arrangements deficient and how you propose to remedy them. (c) Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.

4. (a) Do you consider that the ideal medical training

of indigenous systems of medicine requires (1) That the students should be placed under personal guidance of teachers of first-rate ability and of recognised standing in their subjects; (2) that the teachers and students alike should have access to well appointed hospitals, laboratories, libraries and museums; (3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects? If you share in this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere where there is provision for medical training on indigenous lines? (b) If you consider that this ideal is too high for the present, what would you substitute in its stead, as (1) the ideal to be ultimately achieved, (2) the idea to be worked out in the immediate present.

5. Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of western medicine the traditional knowledge which is of real value and will reject, as western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and western systems of medicine will then disappear." If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

6. Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects

of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches? If you agree with the above view, in whole or in part, please favour the committee with a precis of the course of studies you would propose for students of indigenous medicine, with special reference to (a) the progressive standard corresponding for example, to the existing allopathic qualifications of Licentiate (L. M. P. of our allopathic Medical Schools), Graduate, Masterate and Doctorate (L.M.S., M.B., M.S., M.D., of our Universities). (b) The preliminary qualifications and periods of study for each of the standards proposed. (c) The medium or media of instruction proposed.

7. What are your views on the question of extending Medical Registration to Indigenous Systems of Medicine? If you hold that such extension is necessary and desirable, please favour the Committee with your views regarding (a) the formation of a suitable Registration Board for admitting competent practitioners into the medical register, (b) any changes in, or additions to, the existing legislation on Medical Registration.

8. What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

9. What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the committee with your suggestions for revival?

10. Please state your views as to how the indigenous systems of medicine can be fostered and prompted by (a) the State, (b) the local boards, (c) the Universities, (d) Private agencies (individuals or association).

BIBLIOGRAPHY OF WORKS ON INDIAN
MEDICAL SCIENCE.

GENERAL MEDICINE.

1. Wilson : On the Medical and Surgical Sciences of the Hindus (*Oriental Magazine*, 1823). Works 3, 269-76, 380-93. London, 1864.
Indian Physicians at Bagdad. J.R.A.S.
2. Royle : An Essay on the Antiquity of Hindu Medicine. London, 1837, Cassel 1839, 200s.
3. Wise : Commentary on the Hindu System of Medicine. Calcutta, 1845; London, 1860 and 1900.
Review of the History of Medicine. London, 1867.
Medical Knowledge of the Hindus, *Lancet*, Vol. II, 1846.
4. Stenzler : Zur Geschichte de Ind. Medicin, *Janus* 1, 411-54. Breslau, 1846.
5. Lassen : *IAlt.* 2, 511-13. 1849.
6. Weber : *ILit.* (1) Aufl. 1852, (2) Aufl. 1876, 283-90.
History of Sanskrit Lit., Trubaer and Co., English trans., pp. 265-70.
7. Brian : Coup d'oeil sur la Médecine des Anciens Indiens. Paris, 1858, 15s.
8. Daremberg : Recherches sur l'état de la médecine. *Ann. méd.*, Paris, 1867. S. A. 24s.

Fragments d'histoire et de bibliographie.

Gaz. hebd. de méd. 1883 f.

Resume de l'histoire de la médecine. Paris, 1897, 25-36.

Le Médecine Charaka, etc., in Bull. de l'Ac. de méd., May 11, 1897.

"Susruta." Dict. Encyclop. des sciences médicales.

9. Liétard : Lettres historiques sur l'état de la Médecine chez les Hindous. Paris, 1863, 76s.
10. Mrs. Manning : Ancient and Mediæval India. London, 1869, 1. 334-58.
11. Häser : Lehrbuch der Geschichte der Medicin. 3 Aufl, Jena, 1875, 4-38, mit Beitragen von Stenzler.
12. Hessler : Allgemeine übersicht der Heilkunde der altern Inder. Sitzungsberg Math.-phys. Cl., Munchen, 1887, 1. 137-49.
Der Ayurveda des Sushruta. Erlangæ. I. 1844, II. 1847.
13. Schroeder : Indiens Literatur und Cultur. Leipzig, 1887, 729-33.
14. Dutt : History of Civilization in Ancient India. Vol. II, Ch. IX. Calcutta, 1890, 3, 382-95.
15. Brendes : Die Pharmacie bei den alten culturvölkern. Halle. 1891, 1, 1-30.
16. Kuhn : KZ. XIII. 49.
17. Jolly : Early medical literature of India. Trasac, 9, Cong. of Orient. London, 1903, 454-61.
Médecin von Julius Jolly. Grundriss der Indo-Arischen Philologie und Altertumskunde. Encyclopædia of Indo-Aryan Research, 111 Brand, 10 Heft. Strassburg, 1901.

- Knoblauch, Festgruss an Roth, p. 18.
 Für Quellen Kunde der Indischen Medizin.
 Zt.d. Deutsch. Morgen-Geschichte, 1904.
 Medicine and Divination, Bower MS.,
 JASB. 1891.
 IA. XXI. 29, 129.
 WZKM. V. 103.
 Indian Medicine.
18. Sir B. Sinh Jee : A Short History of Indian Medical
 Science. London, 1896.
19. Pagel : Geschichte der Medicin. Berlin, 1898, 32-7.
20. Macdonnel : History of Sanskrit Lit., London, 1900,
 426f., 435f.
21. Cordier : Origine, evolution, et décadence de la
 Méd. Indienne. Annales d'Hygiène,
 1901, 77-89.
 Vāgbhaṭa et l'Aṣṭāṅgahṛidayasaṃhitā.
 Besançon, 1896.
 Études sur la Médecine Hindoue temps
 Védiques et héroïques. Paris, 1894.
 Bibliographie Médicale de l'Inde.
 Nāgārjuna et l'Uttaratantra de la Suçruta
 Saṃhitā. Anantarivo, 1896.
22. Dietz : Annalecta Medica.
23. Elphinstone : History of India, 5th Ed. pp. 159-60.
24. Ward : Hist., Lit., Mytho. of the Hindoos, Vol. II.
 Serampore, 1815-18.
25. Coats : Transactions of the Literary Society of
 Bombay, Vol. III, p. 232.
26. Grohmann : Medicinisches aus dem Atharva-Veda
 mit besonderem Bezug auf den
 Takman in l. st. ix. 381 ff. 1865.
 IS. IX. 381.

27. Böhlingk : St. Petersburg Diet. Supplement, Vol. VII—Medical Authors. 1879.
28. Roth : Z. D. M. G. xxvi, 441 and 448, 1872.
Monograph on Caraka.
Article critique sur l'édition. Aṣṭāṅgahri-
ḍaya by Pandit Jībānanda Vidyāsāgāra
in Zeitschrift der D. M. G. : T. XLIX.
pp. 184 *et seq.* et Litteraturblatt für
orientalische Bibliographie. l. n., pp.
48-50.
29. Gildemeister : Script Arab. de rebus Indicis, pp. 94-
97. [Flugel, following in the Fihrist-
al-ulum in Z. D. M. G. xi, 148 ff,
325 ff. 1857.]
30. Webb : The Historical relations of Ancient Hindu
with Greek Medicine. Calcutta, 1850.
31. Hoernle : Commentaries of Suśruta, J.R.A.S. 1906-7.
Bower Manuscript with English translation.
Calcutta, 1895.
Studies in the Medicine of Ancient India,
Part I, Osteology. Oxford, 1907.
The Authorship of Caraka Samhita. A. F.
Gesch. d. Medizin, 1908.
32. Ray : History of Hindu Chemistry, Vol. I, Calcutta,
1902 ; Vol. II, Calcutta, 1909.
33. Colebrooke : Transactions of the Royal Asiatic
Society, Vol. I.
34. Haas : Die Heiratsbrauche der Altin Inder Webers
Indische Studien. 1862.
In Volumes XXX, XXXI of J. Germ. Or. Soc.
Z.D.M.G. 1876, p. 617 sq., 1877,
p. 647 sq.
35. A. Müller : In Volume XXXIV of J. Germ. Or. Soc.
Z.D.M.G. 1880, p. 465.

36. Goldstucker : In Mrs. Manning's Ancient and Mediæval India. London, 1869.
37. Bergaigne : Inscr. Sanscrites de Campa et du Cambodge. Paris, 1893.
38. Derselbe : Hippocrates und die Indische Medizin Z. D. M. G., 31, 647-66.
39. Buck : Growth of Medicine from the earliest times to the end of the 18th Century.
40. Heyne : Tracts on India. London, 1814.
41. Csoma de Koros : J. A. S. B., 1835, Jan. No. 37.
42. Eatwell : On the Rise and Progress of Rational Medical Education in Bengal. Indian Annals of Med. Sc. No. xiii, Art. x.
43. Muhammad Mirza : Memorandum on Mahomedan Medicine in India, *ibid*, Art. xi.
44. Neuberger (translated by Playfair) : History of Medicine : "Medicine of the Indians," Vol. I, pp. 43-60. London, 1910.
45. Chakraberty : An Interpretation of Ancient Hindu Medicine. Calcutta, 1923.
A Comparative Hindu Materia Medica. Calcutta.
46. Mazumdar : Medicinal Science in Ancient India. Calcutta Review, February, 1925.
47. Laufer : Beitrage Zur Kenntniss der Tibetischen Medicin. I and II Teil. Von. Heinrich Laufer, Dr. Med. Berlin, Druck Von Gebr. Unger, Bernburger, Str. 30, 1900.
48. Ghose : Sphygmology in Ayurveda, Journal of Ayurveda. Calcutta, 1924.
49. Roy : On the Past and Present State of Medicine in India : Printed as Appendix of Burdwan Fever by Dr. Gopal Chunder Roy. Calcutta, 1876.

86 HISTORY OF INDIAN MEDICINE

50. Bloomfield : Contributions, AJP. vii, xi, xii.
51. Pictet : KZ. U. 24, 321.
52. Gupta : The Ātreya School of Medicine. Calcutta, 1917.
53. Articles in the Āyurveda Journal. Calcutta, 1924-26.
54. Sen, G. : The Medical Science in Ancient India. Calcutta, 1908.
Hindu Medicine, an Address delivered at the
Benares Hindu University. Calcutta, 1916.
The Science of Ayurveda. Calcutta, 1925.
55. Sham Shastry : Kautilya's Arthaśāstra, done into English.
56. Kaviratna, A. C. : Caraka Samhita. Eng. trans. Calcutta, 1899.
57. Bhisagratna K. L. : Sushruta Samhita, Eng. trans. Calcutta, 1907-1916. Introduction.
58. Sarkar, J. : Sushruta Samhitā.
59. Vullers : Alt Indische Geburtshülfe. Janus, 1846.
60. Winternitz : Folk Medicine in Ancient India, Nature, 1898, lviii.
61. Zimmer : Alt indisches Leben. Berlin, 1879.
62. I'Tsing : Records of Buddhist Religion (Takakusu's Ed.)
63. Kunte : Astangahridaya of Vagbhata. Introduction.
64. Sanskrit Language and Literature in Encyclo. Brit., Vol. XXI, p. 294, 9th Ed.
65. Webb-Johnson : Medicine in India. A lecture delivered at a meeting of East India Association, London, on 24th January 1921.
66. Ghosh, H. N. : Ayurvedic system of Medicine and the Question of its Adaptability. A. B. Patrika, Sept. 1923. C.M.J.
67. Reinaud : Memoire sur L'Inde.

68. Mukerjee, G. N. : Mādhava Kara. J. A., Vol. I.
pp. 124-129; 208-217, 1924.
Comparative Medicine, *ibid*, 237-244.
Vṛnda Madhava, *ibid*, 256-259.
Madhavācārya and others, *ibid*, 307-313.
Kārtika Kundu, J. A. Vol. II, 184-187.
Bhāskara, *ibid*, 342-344.
Ravi Gupta and Viṣṇu Gupta, *ibid*, 373-376.
Sālihotra. Historical Quarterly. 1925-1926.
69. Bodding : The Santals and Diseases. Mem, Asiatic
Soc. Bengal, Vol. X, no. i.
Santal Medicine, *ibid*, no. ii.
70. Moberly : Amulets as Agents in the Prevention of
Disease in Bengal, *ibid*, Vol. I, no. xi.
71. Gupta, U. C. : Introduction to Vaidyaka Savda-
sindhu. Calcutta.
72. Watanbe : A Chinese Text Corresponding to a part
of Bower MS., J. R. A. S., April, 1907.
73. Wustendeld : Geschichte der Arab Aerzte.
74. Cureton : A collection of such passages relative to
India, as may occur in Arabic writers.
Wilson's note to the above. J. R. A. S.,
Old Series, vi, 105-115.
75. Heudley : The Indian Systems of Medicine and the
lesson that may be learnt from them
Transac. First Ind. Med. Cong. 1894.

BOTANY, MATERIA MEDICA AND PHARMACOLOGY

1. Ainslie : Materia Medica of the Hindustan. Madras,
1813. 48, 301 s. 4, 2 Aufl. London 1826
2. Roxburgh : Flora Indica, 3 Bde, Calcutta, 1832.
3. Watson : Index to the names of Indian plants,
London, 1868, 637 s. folio.

4. Waring : Pharmacopœia of India. 1868.
Bazaar medicines of India.
5. Dutta : Materia Medica of the Hindus. Calcutta, 1877.
6. Garbe : Die Indischen Mineralien. Leipzig, 1882, 10,
104s.
7. Dymock : Vegetable Materia Medica of Western India.
Bombay. 1883 f. ; 2 Aufl, 1886, 1012 s.
8. Dymock, Warden, Hooper : Pharmacographia Indica.
3 Bde, London, 1889-1893, 599, 641,
643, 205 s.
9. Watt : Dictionary of Indian Economic Products.
6 vols. in 9, London 1889-93, 5326 s,
Index, 1896.
First Presidential Address, Section Pharma-
cology and Indian Drugs, First Indian
Medical Congress, 1894.
The Commercial Products of India. London,
1908.
10. Irvine : Materia Medica of Patna, 1847.
11. Steuart : Punjab Plants.
12. Arjuna : Bombay Drugs (Catalogue), 1879.
13. Drury : Useful Plants of India, 1872. London.
1873, 2nd Ed.
14. O'Shaughnessy : Bengal Dispensatory, 1841.
Bengal Pharmacopœia, 1844.
15. Pal, N. C. : Indian Herbalist, 1873.
16. Khori and Katrak : Materia Medica of India and
their Therapeutics, 1903.
17. Dey : Indigenus Drugs of India, 1867.
Indian Pharmacology—A Review. Second
Presidential Address. First Ind. Med.
Cong. Calcutta, 1894.
18. Mohideen Sheriff : Supplement to the Pharmacopœia
of India, 1869.

Materia Medica of Madras, Vol. I, 1891.

19. Lisboa : Useful Plants of Bombay.
20. Bentley and Trimen : Medicinal Plants. London 1877.
21. Baden-Powel : Economic Products of Punjab.
Lahore, 1868-72.
22. Graham : Catalogue of Bombay Plants.
23. Haunigberger : Thirty-five Years in the East.
24. Murray : Plants and Drugs of Sind. London, 1881.
25. Fleming : Catalogue of Indian Medicinal Plants and
Drugs. Calcutta, 1810.
26. Pyres or Peris : Letter about Indian Drugs to
Manuel, King of Portugal, written
from Cochin, 1516. Journ. de Soc.
Pharm. Lusit. II (1838), 36. Abel
Remusat : None. Melanges Asiatiques
II (1829), 203.
Pedro Josse da Silva : Elogio Historico
noticia completa de Thome Pires, pharma-
ceutico e primeiro naturalista da India.
Lisboa, 1866. Library of the Pharm.
Soc. London, Phamphlets No. 30.
27. Christoval Acosta : Tractado de las Drogas y
Medicinas de las Indias Orientales.
Burges, 1578.
Aromatum Historia, 1574.
28. Garcin de Orta : Colloquios dos Simples, etc. Goa,
1563.
29. Shirazy : Ulfaz Udwigeh. (1630) Trans. by Gladwin.
1793. No. 543, 551s.
30. Beva bin Khās Khan : Madan-us-Shifa-i-Shikandar.
1512.
31. Mahomed Momin : Tupfat-ul-Muminin.
32. Mahomed Akbar Arzani : Karabadine Kaderi. 1658.
33. Boissier : Flora Orientalis. 1867.

34. Wallich : Trans. of Med. and Phys. Soc. of Calcutta
VIII, 1836. Reprinted in Pereira's Mat.
Med. Vol. II, Part 2, 1857, 699.
Subject : Coptis Teeta.
35. MacIssac : T. M. P. S. (Cal.), 1827, Coptis Teeta.
36. Royle : Illustrations of the Botany of the Hima-
layan Mountains and of the Flora of
Cashmere, 1839.
The Commercial Products of India and the
East. 1854.
The Productive Resources of India. 1840.
A Manual of Materia Medica. 1845.
37. Ramkamal Shen : T. M. P. S. (Cal.), 1827. Subject :
Gulancha.
38. Banerjee : Indigenous Drugs of India, Transac.
First Ind. Med. Congress, p. 533. 1894.
39. Mukharji : Anti-Malarious Drugs. *Ibid*, p. 535.
40. Bagchi : Hæmostatic Plants. *Ibid*, p. 536.
41. Ganga Sing : *Tinospora Cordifolia*, *Ibid*, p. 536.
42. Morton : Therapeutics of Calatropis Gigantea.
Ibid, p. 537. I.M.R. 1898, p. 267.
43. Chaitan Mal : Effects of Tribulus Terrestris in
Health and Disease. *Ibid*, p. 537.
44. Sen, H. C. : Treatment of Pathological Hæmor-
rhages. C. M. J. 1906, Vol. I, pp.
233-234.
Spondias Mangifera in the treatment of
diabetes and dysentery. *Ibid*, p. 301.
Treatment of Ascites, *Ibid*, Vol. II, p. 109.
1907.
Original Researches in the treatment of
Tropical Diseases with Indigenous Drugs.
45. Spencer : Neem Oil in Fever in "A record of Indian
Fervers," p. 15. Calcutta, 1899.

46. Birdwood : Practical Bazar Medicines. Calcutta, 1920.
47. Nadkarni : Indian Plants and Drugs. Madras, 1910.
48. Prain : Bengal Plants, 2 Vols. Calcutta, 1903.
49. Indian and Colonial Addendum to the British Pharmacopœia. 1900.
50. Sanyal : Vegetable Drugs of India. Calcutta.
51. Voigt : Hortus Suburbanus Calcuttensis. Calcutta, 1825.
52. Hamilton : Prodrômus Floræ Nepalensis. Londini, 1825.
53. Boissier : Flora Orientalis, 1867.
54. Gupta : Vanaśadhidarpaṇa in Bengali. Calcutta, 1908.
55. Pratt : Flowering Plants.
56. Warden, Bose : False Bikh or Bikhma (*Aconitum palmatum*), Ph. J., 1892.

Note on the presence of Cholesterol in the
Roots of *Hygrophila spinosa*. Pharma-
cographia Indica. Index and App., p. 191.

57. Bose, C. L. : Analysis of East Indian Plantains.
Ibid, Vol. III, pp. 446-447.

On the Chemistry and Toxicology of *Nerium*
odorum, Trans. Chem. Soc. 1901,
I. M. G. 1901, Coates Memo. Prize
Essay. C. U., 1900.

On the Toxic properties of the fruits of
Luffa Aegyptiaca, bitter variety (Teeta
Dhoondul), C. M. J., 1906.

58. Dutta, R. C. : Kurchicine, the new alkaloid of
Wrightia antidysenterica, Calcutta Medi-
cal News. February, 1880.
59. Ghose, R. D. : The Bark of *Wrightia Antidysenterica*.
Transac. Cal. Med. Soc. Vol. I, pp.
175-186. 1880.

60. Ghose, H. N. : A Report on *Ixora Coccinea*. C. M. J., Vol. III, pp. 419-427. 1908-1909.
61. Chopra : The Pharmacology and Thearapeutics of *Boerhavia diffusa* (Punarnava). I. M. G. 1923.
 Investigations into the Santonine obtained from *Artemesia brevifolia*, I.M.G. 1924.
 Some Medicinal Plants from the Himalayas.
62. Chopra, Bose : Observations on the Anti-diabetic properties of *Cephalandra Indica*. I.M.G. 1925.
 Cephalandra Indica in Diabetes. I. J. M. R., 1925.
 Note on the Pharmacology and Therapeutics of *Adhatoda vasica*. I. M. G. 1925.
 Some Observations on the Pharmacology, Action and Therapeutic properties of *Adhatoda vasica*. I. J. M. R. 1925.
63. Ghosh : Chemistry of Indigenous Drugs : 1. *Adhatoda vasica* (Vāsaka) 2. *Terminalia Arjuna*, (Arjun) 3. *Saussurea Lappa* (Kuṣṭha) Ann. Rep. of C. S. T. M., 1923, p. 48.
64. Ghose, Ghose, Dutt : Chemistry of Silajatu, *Tribulus terrestris* (Gokhura), *Butea froadosa* (Palasa), *Saussurea Lappa* (Kut), *Terminalia Arjuna* (Arjun), *Seraluta anthelmentica* (Somraja), *Holarrhena antidysenterica* (Kurchi). Abhrak Bhasma (calcined mica), Vanga bhasma (calcined tin). Ann. Rep. of C. S. T. M. 1925.
65. Kirtikar, Bose, B. D. ; Indian Medicinal Plants. 2 Vols.

66. Kirtikar : The Poisonous Plants of Bombay, 1903.
Botanical Characters of Indian Poisonous
Plants, in Lyon's Medical Jurisprudence
for India, 2nd 3d. 1890, pp. 520-30.
67. Birdwod : Catalogue of Matheran and Mahabaleswar
Plants.
68. Ghosal : *Terminalia Arjuna*. Coate's Memorial
Prize Essay. C. U. 1908.
69. Kurz : Forest Flora of British Burma. Calcutta, 1877.
70. Cooke : The Flora of the Presidency of Bombay.
London, 1901.
71. Stewart : Illustrations of the Forest Flora of N. W.
and Central India. London, 1874.
72. Haines : A Forest Flora of Chota-Nagpur, Calcutta,
1910.
73. The Second Report of the Indigenous Drugs Com-
mittee. Simla, 1909.
74. Strachey : Catalogue of the Plants of Kumaon,
Garhwal and Tibet. 1852. Revised by
Duthia. London, 1906.
75. Beddome : Ferns of British India. Madras, 1869,
1876.
Ferns of S. India, 2 vols. and Suppl.
1863-70.
Flora Sylvatica of S. India, 2 vols. Madras,
1869-73.
Icones Plantarum Indiæ Orientalis, Madras,
1868-74.

SURGERY AND MIDWIFERY.

1. Jivanram Vaidya : Forceps used by the Ancients of
India. Bombay, 1892.
2. Mukhopādhyāya : The Surgical Instruments of the
Hindus with a comparative study of

the surgical instruments of the Greek, Roman, Arab and the Modern European Surgeons. Calcutta, 1912.

Midwifery in India : Indian Medical Record. 1925.

The Science and Art of Midwifery as known to the Hindus. 1926.

Restoration and Development of Āyurveda. Journal of Āyurveda, 1926.

3. Holwell : Account of the manner of inoculating for Small-Pox in the East Indies. London, 1767.
4. Das, S. M. : History of Midwifery in Bengal, C. J. M., Vol. II., pp. 140-145. 1907-8.
5. Ghosh : Difficult Labour and its Treatment according to the Ancient Hindu Physicians. Proc. and Transac. of the Second Or. Confer. 1922.
6. Dass, K. N. : Midwifery in India. Indian Medical Record. February, 1924. Am. Jour. Obs. Gynæ., 1923.
7. Banerjee : A note on the Illustrations of the Surgical Instruments of Tibet (Journ. and Text, Buddhist Text Society, Part III, 1894, Proceedings IX ; Surgical Instruments and Appliances in Ancient India and Tibet. Plates I, II, III. *Ibid*, Appendix.
8. Mullick : Hindu Midwifery, C. M. J. April, 1916.
9. Walsh : Tibetan System of Anatomy, JRAS.
10. Ray, S. K. : Surgery of the Ancient Hindus, C.M.J. 1925.
11. Mitra : Die Geschichte der Gyn. u. Geburtshilfe des Alt Indiens. Innsbruck Kongress, 1924.

Development of Midwifery and Gynaecology with special reference to that of Ancient India. C.M.J. 1926.

12. Sen, G. : The Practice of Surgery in Ancient India. Indian Med. Record. Oct., 1914. Nov., 1915.

Indian Medicine and Surgery.—a Sketch.—Forward, Nov. 15, 1925.

13. Goswami : Āryadhātrīvidyā and Puṁsavana in Bengali. Calcutta.

HISTORY OF MATERIA MEDICA AND OTHER

COGNATE SUBJECTS.

1. Flückiger and Hanbury : Pharmacographia : A History of Drugs, 2nd Ed. 1879.
2. Guibourt : Hist. des Drogues, 1849.
3. Hill : History of the Materia Medica.

A T ALOGUES.

The following catalogues should be consulted for notices of Āyurvedic books :—

Abbreviations.

Names of Catalogues.

- Z. d. D. M. G. = Zeitschrift der Deutschen Morgenländischen Gesoelschaft.
- B. C. = Sūcipustakam. Cat. of Sanskrit MSS. in the Library of the Asiatic Society of Bengal.
- Cat. Cat. = Catalogus Catalogorum.
(Leipsic, 1891, Supplement 1896.) It gives a list of Sanskrit MSS. in the alphabetical order of works and authors.
- I. O. Cat. = India Office Catalogue.
- Oxf. Cat. = Catalogi Codicum Manuscriptorum bibliothecæ Bodlianae codices Sanscritcos, by Aufrecht. Oxford, 1869.
- B. M. C. = British Museum Catalogue. By P. C. Bendal. London, 1902.
- Bkr : Bhandarkar's Report on the search of Sanskrit MSS. in the Bombay Presidency. Bombay, 1893.
- Bkr. 2 Rāj : Bhandarkar's Report of a Second Tour 1904-6 in search of Sanskrit MSS. in Rājputana and Central India.
- S. B. L. (Nepal) : The Sanskrit Buddhist Literature of Nepal. By R. L. Mitra. Calcutta, 1882.
- Tanjore Cat. : A classified Index to the Sanskrit MSS. in the Palace at Tanjore. By Burnell. London. 1880.
- L = Notices of Sanskrit MSS. in the Asiatic Society of Bengal. By Dr. R. L. Mitra,

Vol. I-IX. Calcutta, 1880. By H. P. Śāstri, Vol. X and XI.

Bik. Cat. = Sanskrit MSS. in the Library of H. H. the Maharaja of Bikaner.—A Catalogue of, by Dr. R. L. Mitra. Calcutta, 1880.

Notices (2nd Series): By H. P. Śāstri. Vol. I; II-III.

Nepal Cat.: Catalogue of MSS. in the Durbar Library in Nepal. By H. P. Śāstri.

Peterson: Report in the Search of Sanskrit MSS.

Rep.: Report on the Search of Sanskrit MSS. 1895-1900. By H. P. Śāstri.

Ulwar: Catalogue of Sanskrit MSS. in the Library of H. H. the Maharaj of Ulwar. By Peterson. Bombay, 1892.

Stein: Cat. of Sanskrit MSS. in the Raghunath Temple Library of H. H. the Maharaja of Kāshmir and Yammu. By M. A. Stein.

C. S. (Cat.): Catalogue, Sanskrit College Library, Calcutta.

W.: Weber's Berlin Catalogue.

B. N.: Buniyon Nanjies.

Ep. Ind.: Epigraphia Indica.

C. B. T.: Cat. of the Chinese Transcript of the Buddhist Tripitaka.

G. O. M. L.: Cat. of Government Oriental MSS. Library, Madras, XXIII—Medicine.

Taylor: A catalogue raisonne of Oriental MSS. in the Library of College, Fort St. George, 3 vols. Madras, 1851-62.

Kielhorn: Classified Alphabetical Catalogue of Sanskrit MSS. in the South Division of the Bombay Presidency, Bombay, 1869.

Report on the search for Sanskrit MSS. in the Bombay Presidency. Bombay, 1880-81.

ABBREVIATIONS.

In these volumes the following abbreviations have been used for the names of authors and their books :

Abbreviations.	Names of Authors and Books.
C. S.	= Caraka Saṁhitā
S. S.	= Suśruta „
A. S.	= Aṣṭāṅga Saṁgraha
A. H. S.	= Aṣṭāṅga Hṛdaya Saṁhitā
M. N.	= Mādhava Nidāna
V. M.	= Vṛiṇḍa Mādhava
C. P. D.	= Cakrapāṇi Datta
Bhā	= Bhānumati
B. P.	= Bhāva Prakāśa
Śā. S.	= Śāraṅgadharma Saṁgraha
V. K. V.	= Vyākhyā Kusumavali
V. M. K.	= Vyākhyā Madhu Koṣa
G. N.	= Gada Nigraha
R. R. S.	= Rasaratna Samuccaya
R. C.	= Rasendra Cintāmaṇi
R. H.	= Rasa Hṛdaya
R.	= Rasārṇava
A. T.	= Agniveśa Tantra
B. S.	= Bhela Saṁhitā
J. S.	= Jatukārṇa „
P. S.	= Parāśara „
H. S.	= Hārta „
K. S.	= Kṣārāpāṇi „
V. S.	= Vṛddha Suśruta
V. H.	= „ Hārta
V. B.	= „ Bhoja
A. V.	= Asva Vaidyaka
AV.	= Atharvaveda

RV.	=	R̥gveda
YV.	=	Yayur Veda
SV.	=	Sāma Veda
Ni. S.	=	Nivandha Saṁgraha
T. C.	=	Tattva Candrikā
K. K.	=	Kartika Kuṇḍu
D.	=	Dallvaṇācārya
G.	=	Gayadāsa
J.	=	Jaijñāṭhācārya
H.	=	Haricandra
R. G.	=	Ravi Gupta
A. D.	=	Aruṇa Datta
S. K. D.	=	Śrīkanṭha Datta
Ṭ. R.	=	Vijaya Rakṣitā
R. S. S.	=	Rasendra Sāra Saṁgraha
R. K.	=	Rasendra Kalpadruma
Si. S.	=	Sivadāsa Sena
B. M.	=	Bhāva Miśra
V. J.	=	Vaidya Jivana
Y. R. K.	=	Yogarātnākara
R. N.	=	Rāja Nighantā
D. N.	=	Dhanvantari Nirghantu
M. P. N.	=	Madana Pala „
Y. T.	=	Yoga Taraṅgini
Ā.	=	Ātreya
A.	=	Agniveśa
R. P.	=	Rasa Pradīpa
V. V. P.	=	Vṛamha Vaivarta Purāṇa
N.	=	Navanītaka
A. R.	=	Āyurveda Ratnākara

NOTICES,
BIOGRAPHICAL AND BIBLIOGRAPHICAL,
OF THE
ĀYURVEDIC PHYSICIANS
AND THEIR WORKS ON MEDICINE

CHAPTER V

AGNI

Agni, to whom next to Indra, are addressed the greatest number of hymns is one of the most important gods in the R̥gveda. There he is described as the Purohita or Priest (i, 1, 1; 44, 10, 12; 58, 3; 94, 6; 127, 2; 128, 4; iii, 2, 8; 3, 2; 11, 1; 13, 3; 21, 3; 28, 8; v, 11, 2), and as the King and the Superintendent of worship (i, 1, 8; 44, 8, 9; 65, 10; iii, 3, 3; 9, 8; 27, 2; iv, 3, 1; viii, 43, 4; x, 52). Various functions are ascribed to him: He is Hotri (i, 1, 1; 12, 1; 13, 4; 26, 2, 5; 31, 3; 44, 7; 45, 7; 58, 1; 67, 2; 76, 2; 77, 1; 94, 6; 127, 1, 2, 10; 128, 1; 141, 12; 143, 1; 144, 1; 149, 5; ii, 3, 1; 5, 1; 6, 6; 7, 6; 9, 9; iii, 1, 22; 2, 6, 15; 3, 2; 4, 4, 5; 5, 4; 6, 2; 7, 9; 9, 9; 11, 1; 14, 1; 17, 2, 5; 19, 5; 21, 1; 27, 7; iv, 8, 4; v, 13, 3, 4; 20, 3; vii, 16, 5; x, 2, 1; 91, 8-11), Adhvarju (i, 94, 6; iii, 5, 4; x, 91, 10), the banner (iii, 3, 3; 10, 4; 29, 5; vi, 2, 3) and the father of sacrifices (iii, 3, 4), Nestri (ii, 5, 5; x, 91, 10), Prasastri (ii, 5, 4; x, 91, 10), Potri (i, 94, 6; ii, 5, 2; iv, 9, 3; vii, 16, 5; x, 91, 10), Agnidh and Brahmāya (x, 91, 10).

He is described as the great (i, 36, 12; 79, 5; 94, 6; 128, 4; 145, 2; 188, 1; ii, 3, 1; 6, 7; iii, 1, 22; 21, 4), the wise (i, 12, 1; 31, 2; 71, 10; 77, 3), and the purifier (i, 12, 9, 10; 95, 11; 142, 3; ii, 3, 1; 7, 4; iii, 2, 6; 5, 7; 10, 8; 17, 1; 21, 2; v, 23, 4; 26, 1). He is called Tanūnpāt (i, 13, 2; 142, 2; 188, 2; iii, 4, 2; 29, 11; x, 110, 2), Narāśamsa (i, 13, 3; 142, 3; ii, 3, 2; iii, 29, 11; v, 5, 2=

Avesta Nairyo-Sanha, *i.e.*, praised by men), Jātavedas (i, 44, 4; 45, 3; 49, 5; 77, 5; 78, 1; 94, 1; 99, 1; 127, 1; ii, 2, 1, 12; 4, 1; iii, 1, 20, 21; 2, 8; 3, 8; 6, 6; 10, 3; 11, 4, 8; 15, 4; 17, 2, 4; 20, 3; 21, 1; 22, 1; 23, 1; 25, 5; 26, 7; 28, 1—4; 29, 2; iv, 1, 20; 3, 1; 5, 11, 12; 12, 1; 14, 1; v, 4, 4, 10; 5, 1; 9, 1; 22, 2; 26, 7), Vaiśvānara (i, 39, 1; 49, 5, 6; 98, 1—3; iii, 2, 3; 26, 1; iv, 5, 1; v, 27, 1) and Vasu (i, 31, 3; 44, 3; 45, 9; 79, 5; 94, 13; 127, 1; 143, 6; ii, 3, 4; 7, 1; 9, 1; iii, 4, 1; 15, 3; 18, 2; 19, 3; iv, 5, 15; 12, 6; v, 3, 10; 6, 1; 24, 2). He is Mātariśvān (i, 96, 4; 128, 2; 147, 3; 148, 1; iii, 5, 8; 26, 2, 3; 29, 11), Jarābodha (i, 27, 10), Usig (iii, 3, 7, 8; 11, 2; 15, 3; 27, 10; iv, 1, 15; 6, 11), Aṅgira Ṛṣi. (i, 31, 1, 2; 74, 5; 75, 2; 127, 2; iv, 9, 7; v, 8, 4; 10, 7; 21, 1; ii, 84, 4; 102, 17), Dvaivādāsa (vii, 92, 2; viii, 103, 2), and Trāsadasyavam (viii, 19, 22).

His relationship with the other gods.—Agni is identified with the following gods:—Mitra (i, 94, 13; ii, 1, 4; iii, 5, 4, 8; v, 3, 1; vii, 12, 3); Varuṇa (ii, 1, 4; iii, 5, 4; v, 3, 1; vii, 12, 3); Tvastṛi (ii, 1, 5), Indra (ii, 1, 3, 6, 5; iii, 9, 2; v, 3, 1); Indra and Vāyu (Nirūkta, vii, 5); Viṣṇu (ii, 1, 3; Nir, xii, 19); Aryamān (ii, 1, 4; v, 3, 2); Anīša (ii, 1, 4); Ābbus (iii, 5, 6); Rudra (i, 27, 10; iii, 2, 5; v, 3, 3); Aditi (i, 94, 15); Viśvadeva (i, 3, 4); Bhārata (i, 96, 3; ii, 7, 1); Āditya (ii, 3, 4); Brahmānaṣpati; Vidhātṛ (ii, 1, 3); Visvāsam (v, 22, 2); Asura (iv, 2, 5; v, 12, 1; 15, 1; vii, 2, 3; 6, 1; 13, 1; 30, 3); Puṣāna; Savitr; Bhaga; Hotrā; Bhārati; Ilā and Sarasvatī (i, 164, 46; ii, 1, 3-7; iii, 5, 4; v, 3, 1-3; vii, 12, 3; x, 8, 5).

They call him (Sun) Indra, Mitra, Varuṇa, Agni, etc.; that which is one they call it variously Agni, Yama, Mātariśvān (Rv. i, 164, 46). In v. 3, 1-2, the

altar-fire Agni is called Varuṇa and Indra ; in him are said to live all the gods. See also x, 114, 5 ; and iii, 38, 7, where reference to various forms of Agni is given.

Agni becomes Varuṇa in the evening, rising in the morning he is Mitra, becoming Savitr he moves through the air, and as Indra he glows in the middle of the sky (Av, xiii, 3, 13). Agni is said to be the mouth of the Ādityas, the tongue of the gods (ii, 1, 13, 14), and the companion of the Ratisāk or bounteous gods (ii, 1, 13). Through him, not only the gods, but even the mortals taste their drinks (ii, 1, 14). Agni is said to bring Varuṇa, Indra, and the Maruts to the ceremony (x, 75, 11) ; he worships them (vii, 11, 3 ; viii, 91, 16 ; x, 7, 6), obeys their commands (x, 52, 1) and shares the adoration which they receive (i, 36, 4 ; ii, 2, 1). He is often prayed for to eat the offerings (iii, 21, 1 ; 28, 1-6) and drink the Soma juice (i, 14, 10 ; 19, 9 ; 21, 1, 3) with Indra (vii, 93, 6 ; viii, 38, 4, 7-9). He is worshipped by Varuṇa, Mitra, the Maruts and 3,339 gods (iii, 9, 9 ; 11, 4 ; x, 69, 9). He helps Varuṇa, Mitra and Aryamān (i, 141, 9).

His Parents.—Agni is said to be the son of Heaven and Earth (i, 140, 7 ; iii, 2, 2 ; 3, 11 ; 25, 1 ; x, 1, 2 ; 2, 7 ; 46, 9), of Tvāṣṭr (i, 95, 5 ; iii, 7, 4 ; x, 46, 9 ; see Hillebrandt's *Vedische Mythologie* i, 522 *seq.*, Bergaigne, *Rel. Ved.*, vii, 26, 6 ; iii, 47, *seq.*, x, 2, 7), of Ilā (iii, 29, 3), and also as the ghr̥ta-sprinkling offspring of Manu (i, 45, 1). Agni, the hidden god (i, 95, 4 ; iii, 1, 9, 14 ; 5, 10 ; 9, 5 ; v, 11, 6), is said to be of twofold births,—celestial and terrestrial (i, 47, 4, 5). The terrestrial birth refers to the generation of Agni by means of friction between two kindling sticks, araṇis (i, 68, 2 ; 127, 4 ; iii, 29, 1, 2, 3 ; 23, 2, 3 ; v, 9, 3 ; vii, 1, 1 ; viii, 23, 25 ; x, 5, 3 ; 7, 5 ; 49, 15 ; 24, 4), one the father, the other the mother. Thus his two mothers are described to be the two kindling sticks

(i, 31, 2; 128, 3; 141, 4). Sometimes Agni is said to be born with the fingers which twirl the sticks (iii, 26, 3; iv, 6, 8; x, 4, 6) which die when he is born (x, 79, 4). He is also said to have three births;—one in the sea as sun (x, 5, 7), one in the heaven as lightning, and one in the waters (i, 95, 13; x, 45, 3). He is described as the child of water (i, 143, 1; 144, 2; 145, 5; ii, 1, 1; iii, 1, 3; 3, 5; 5, 3; 9, 1, 2, 4; 11, 12; vii, 9, 3; x, 2, 7; 91, 6); or its grandson (x, 8, 5). In x, 51, he is said to have been desired by the gods to come out of water and plants on a promise of his long life and a share in the sacrifice. He is also said to have been born out of heaven, out of the water and the stone, out of the forests and herbs (ii, 1, 1; iii, 1, 13). Indra is said to have generated him between two clouds or stones (ii, 12, 3). Bhṛgu discovered (x, 4, 6, 2) and worshipped him in the abode of the waters (ii, 4, 2; iii, 1, 3), appointed him as messenger (i, 71, 4), and placed him among men (i, 58, 6; 143, 4; iv, 7, 1, 4; vi, 15, 2). Aṅgīrasa discovered Agni (v, 11, 6), and the Aṅgīrasa family introduced and extended the fire worship (i, 71, 2, 3). Another account says that Mātārisvān produced the hidden one (i, 60, 1; 71, 4; 93, 6; 141, 3; 143, 2; iii, 5, 10; 9, 5; vi, 8, 4; x, 46, 9) and brought Agni from the gods (iii, 9, 5) in the sky (x, 5, 7) and gave him as a gift to Bhṛgu who, in his turn, gave him to Manu. In Rv. vi, 16, 13, we find that Atharvan Ṛṣi first produced fire निर अमन्यट "Thee, Agni, from out the sky Atharvan twisted." (See x, 21, 5.) This अमन्य reminds us of the Greek Prometheus or Prometheus, the son of Titan Iapetus and Clymene. He stole fire from heaven and brought it to men, when Zeus refused mortals the use of fire. This theft displeased Jupiter so much that he sent Pandora to Prometheus with a box that was filled with

all sorts of evils. His brother Epimetheos married Pandora, who opened her box and let evils, trouble and diseases hitherto unknown spread over the earth. Hope alone remained in the box.

‘No pow’r the pride of mortals can controul:

Prone to new crimes, by strong presumption driven,
With sacrilegious hands Prometheus stole

Celestial fire, and bore it down from heaven !
The fatal present brought on mortal race

An army of diseases; death began
With vigour then to mend his halting pace,
And found a most compendious way to man.”

Horace, *Carm.*, 1, x.

In vi, 16; 14, Dadhici, the son of Athavan is said to have kindled fire. Trita, the son of Vibhuvasa, received Agni on land (x, 46, 3).

The Atharvans were so called as they were appointed to take care of the sacrificial fires: from Atharya=fire. The Persian fire-priests held similar functions as Atharvans. The fire-god of the ancient Iranians was Atar (See Rogozin's *Story of Medea*, pp. 130-152; x, 46, 2, 9.) Some declare that Bhadr̥yāśva first kindled fire, and so he is called Agni Bhadr̥yāśva (x, 69, 1). He is sometimes described as the son of Vala or Strength (iii, 14, 1) or his grandson (ii, 6, 2). He is also said to have been generated by Daus (x, 45, 8), by the Dawn (vii, 78, 3), by Indra and Viṣṇu (vii, 99, 4), by Tvaṣṭā (x, 2, 7), and by the gods (vi, 7, 1; vii, 91, 17; x, 46, 9) who placed him among men (i, 36, 10; ii, 4, 3; vi, 16, 1; vii, 7, 5; viii, 73, 2) as a light to the Aryan people (i, 59, 2). For his three-fold origin see *Rv.*, i, 95, 3; iii, 26, 7 = *Vāj. S.*, xvii, 66; v, 4, 8; vii, 39, 8; x, 45, 1 = *Vāj. S.*, xii, 18; x, 5, 6, = *S. V.*, 1, 65) and for twofold

origin, see i, 60, 1; 140, 2; 149, 2, 3; ii, 9, 3; vii, 43, 28. Agni's three-fold birth represents "the first triality, which, philosophically, is interpreted as a trinity" (Hopkins) in later times: the sectarian trinity where Viṣṇu is the sun, and Rudra, the lightning.

Varuṇa is described as his brother (iv, 1, 2) and Indra his twin brother (vi, 59, 2). Svāhā is his wife and Uṣā, his daughter (i, 71, 5).

Agni is compared to a delightful new-born infant (i, 69, 4), which like spirits, is difficult to catch (i, 168, 2.....x, 7, 5; 49, 15). He consumes his parents after birth (x, 79, 4). He does not suckle her mother's breasts (x, 115, 1) but is nourished by oblations of clarified butter (iii, 21, 1, 3) which is his food (i, 7, 6; iii, 17, 1; 27, 5; v, 11, 3; 14, 6; vii, 3, 1; viii, 39, 3; 43, 10, 22; x, 69, 1, 2; 118, 4, 6; 122, 2; Av., i, 7, 2), his eyes (iii, 26, 7) and his hairs (viii, 49, 2). He is butter-backed (v, 4, 3; 37, 1; vii, 2, 4; x, 122, 4), shines with butter (iii, 18; v, 11, 1; x, 21, 7) and issues from butter (ii, 3, 11; v, 8, 6). He is all devouring (viii, 44, 26) and is also fed by wood (ii, 7, 6; vii, 3, 4; x, 45, 8; 79, 7). He swallows his food without mastication (x, 79, 1, 2).

His appearance.—He is the never-ageing (i, 27, 9; 53, 4; 143, 3; 144, 4; 146, 2, 4; iii, 2, 2; 6, 4; 7, 7), immortal (i, 26, 9; 31, 7; 44, 6, 11; 58, 1; 72, 6; 77, 1; ii, 10, 1, 2; iii, 1, 18; 2, 11; 3, 1; 11, 2; 17, 4; 27, 5, 7; iv, 11, 5; v, 4, 10; 14, 2; 18, 5; vi, 9, 4; vii, 4, 4; viii, 60, 11; x, 79, 1), young (vi, 7, 7), god (i, 26, 10; 31, 8; 36, 6, 15; 44, 4; 145, 3; 147, 2; 189, 2, 4; ii, 7, 1; iii, 9, 6; 19, 4; 23, 1; iv, 2, 10; 4, 6; 12, 4; v, 1, 10). He is described as having four eyes (i, 31, 13), or hundred eyes (i, 128, 3), or thousand eyes (i, 79, 12). He is long-tailed (i, 27, 1)

with the banner of smoke (i, 23, 11; 44, 3; 94, 10; iii, 10, 4; 11, 3; v, 11, 3; 43, 4; 44, 10; x, 4, 5; 12, 2). His hairs are the terrible (i, 36, 10, 20) blazing (i, 45, 6; iii, 14, 1; 17, 1; 27, 4; v, 8, 2; vi, 41, 10) red flames (i, 36, 9; iii, 14, 1; 17, 1; 27, 4; v, 8, 2)—the grass-consuming sparks (i, 94, 1), with which as the forest—fire, when driven by wind, he shears the hairs of the earth (i, 58, 4, 5; 65, 4, 8; 67, 1) like a barber shaving a beard (x, 142, 4), carves the wood (i, 27, 4) and eats and chews with his sharp jaws the forests (i, 143, 5; ii, 2, 5; 4, 5, 6, which are rendered black by his tongue (i, 143, 5; vi, 41, 10; 60, 10; x, 79, 2). Agni is therefore described as the lord of forests (iii, 8, 1, 3, 6, 11). He is without head and foot (iv, 1, 11) but is sometimes represented as having a burning head (vii, 3, 1), or three heads with seven tongues and seven rays (i, 146, 1; ii, 5, 2). His face is turned everywhere (i, 97, 8). He shakes his thousand horns (i, 79, 2; 140, 6; v, 2, 2). He is gay, beautiful and blameless (i, 31, 9; 94, 7; 143, 3; 144, 7). He is formed of gold (iv, 3, 1; x, 20, 9) and he has golden beard (v, 7, 7). His teeth are sharp (i, 79, 6; 14, 3, 5; iv, 5, 4; 15, 5; viii, 19, 22), burning (i, 58, 5; vii, 23, 4 and brilliant (v, 7, 7),—the golden (v, 2, 3) and iron grinders (x, 87, 2) are set in sharp and consuming jaws (viii, 49, 13; x, 79, 1), the sharp iron (x, 87, 2) teeth (i, 79, 6) set in fierce jaws (i, 36, 16; 58, 5). His two teeth (x, 87, 3), strong as iron (x, 87, 2) cut the Rakṣasas, especially the cannibals, and those who steal cow's milk (x, 187, 16).

Forms of Agni.—Agni is the altar-fire. The other fires are verily Agni's branches (i, 59, 1; vii, 1, 14; viii, 19, 33). He has hundred manifestations and shines like the sun (i, 49, 3; vii, 3, 6; 8, 4; x, 91, 4). As sun, he is the bright great splendour of dawn (i, 94, 5;

146, 4; v, 17, 3), the solar hero (ii, 2, 1). He, as moon, determines the season of the dwellers on earth (i, 95, 3). He assumes the fierce appearance which is above, *i.e.*, lightning (i, 95, 8). His triple existence is explained by his three-fold manifestations: Sun in heaven, lightning in the atmosphere and as fire on the earth (x, 88). In this hymn Sun is identified with Agni (v, 6; Yāska in Nirukta, vii, 27, 28).

The Agni in this earth has also three forms. He is called Kravyād and is besought to burn the body of the dead in such a way as not to destroy it completely (i, 162, 20; x, 16, 4) but to send the soul to the Fathers in the world of the righteous. In x, 16, 9, 10, such a funeral Agni is spoken of as an object to be repelled. In Vāj. S., i, 17, Agni is prayed to drive away two of his own forms: Krāvyād (=devourer of dead flesh or funeral fire) and Āmād (=devourer of raw flesh or culinary fire) and to bring Yāyā yogaḥ or sacrificial fire. Compare also Vāj. S., xviii, 51. In Taitt. S., ii, 5, 8, 6, we have three forms of fire mentioned: Hayavāhana for Devas; Kavyavāhana for the Pitṛs (Fathers) and Saharakṣtaḥ for the Asuras.

His power.—He is the divine monarch, strong as Indra (vii, 6, 1), the king of all treasures which dwell in the mountains, in the earth, in the herbs, in the waters, in the sky and among men (i, 59, 3; 72, 1; vii, 6, 7; 9, 3; x, 4, 1; 6, 6; 91, 3). He is the giver of wealth (i, 46, 1, 8; 127, 11), the priest (x, 110, 11; 150, 4) and the swift (x, 6, 4) messenger of the gods (i, 36, 3-5; 44, 7, 11; 72, 7; 183, 1; ii, 6, 6; iii, 3, 2; 5, 2; 6, 5; 11, 2; iv, 2, 2; 8, 1; v, 11, 4; Taitt. Br., ii, 4, 1, 6; Taitt. Sam., ii, 5, 8, the carrier of oblations (i, 36, 10; 72, 7; iii, 9, 6; 11, 2; v, 25, 4) and the law-giver of the gods (i. 31, 2, 10; 15, 3). Agni is the bond of communication

between gods and men (i, 12, 1, 2, 4, 8; 27, 4; 36, 3-5; 44, 2, 3, 5, 9, 12; 58, 1; 74, 4, 7; 188, 1; ii, 6, 6, 7; 9, 2; 10, 6; iii, 6, 5; 9, 8; 11, 2; 17, 4; 21, 1, 5; iv, 1, 8; 2, 3; 7, 8; 8, 2, 4; v, 8, 6; 21, 3; vi, 15, 8-10; vii, 11, 4; 16, 4; 17, 6; viii, 19, 21; 23, 18, 19; 39, 1, 9; 44, 3; x, 4, 2; 46, 10; 91, 11; 122, 7). He is god among gods (i, 31, 9; 94, 13), bull among animals (i, 31, 5; 58, 4, 5; 79, 2; 128, 3; 140, 6, 10; 141, 2; 145, 2; ii, 1, 3; 3, 11; 9, 2; iii, 4, 3; 6, 5; 7, 6, 7; 15, 3; v, 2, 12; 12, 1). He kills many enemies in battle with a few companions (i, 31, 6). His weapons are sharp (iv, 4, 4; 5, 3). He slew the Dasyus and Rakṣasas (iii, 15, 1; vii, 13, 1; 15, 10; viii, 23, 3; 43, 26; x, 87, 1, 2, 5; 9, 14) and cut down Śambara. He defeated the Panis (vii, 6, 3; 9, 2) and drove away the Dasyus (i, 59, 2; vii, 5, 6; x, 69, 6). He killed Jarutha, bringing him out of water (x, 80, 3). Like Indra, he is also said to be the slayer of Vṛitra (iii, 20, 4) and destroyer of cities (i, 59, 6; 78, 4; vi, 16, 14, 39, 48; vii, 5, 3; 6, 1, 2; viii, 63, 4; Av., iv, 23, 5; vii, 110, 1). Agni protected Atri, Bharadvāja, Gavisthira, Kaṇva and Tryasdasyu in battlefield (x, 150, 5). He is fearful like an army let loose (i, 66, 8; 142, 4; 143, 5). He roars like thunder (vii, 3, 6; viii, 91, 5; x, 45, 4), like the wind (viii, 91, 5) and like a lion (iii, 2, 11). His flames roar like the waves of the sea (i, 44, 12) and terrify the birds when he devours grasses (i, 94, 10, 11). He resounds as the Maruts and as lightning (i, 143, 5) and is the conqueror of thousands (i, 188, 1).

Divine honours.—He is said to have produced the two worlds and upheld the earth and sky (i, 67, 3, 5; iii, 5, 10) and kept them apart (i, 96, 4; iii, 5, 10; 6, 5; vi, 7, 7; 8, 2, 3; vii, 5, 4, 6). He formed the

luminaries of heaven (vi, 7, 7 ; 8, 2) and placed the sun in the sky (x, 56, 4). He adorned the sky with stars (i, 68, 5, 10) and caused the sky to roar (i, 31, 4). He is said to bestow vigour (i, 166, 4) and to grow up with might within the plants, within the children and within the sprouting grass (i, 67, 9 ; 95, 10). He begot Mitra (x, 8, 4) ; and created all creatures that move (x, 88, 4). He is the head of the sky and the centre of the earth (i, 59, 2 ; vi, 7, 1 ; vii, 44, 16 ; x, 88, 5). Before him, the men tremble (ii, 8, 3 ; 9, 1 = Vaj. S. xi, 36 ; vi, 7, 5 ; vii, 44, 25 ; 92, 3) and the gods fear him (vi, 9, 7). He sees all creatures (iii, 55, 10 ; x, 187, 4), knows the births of gods and men (i, 70, 1, 3 ; iii, 4, 11 ; vi, 15, 3) and the secrets of mortals (viii, 39, 6). He destroys darkness (i, 94, 7 ; 140, 1 ; x, 88, 2) as he is brilliant (i, 27, 6 ; 140, 1 ; ii, 10, 2 ; v, 2, 3 ; 26, 2 ; vi, 10, 3 ; 15, 2 ; vii, 9, 3 ; 12, 1 ; 15, 10 ; viii, 19, 2 ; 23, 20 ; 4, 3, 31).

Agni's chariot and horses.—His beautiful car (ii, 3, 9 ; iv, 2, 4) is made of gold (iv, 1, 8). As he drives his two ruddy, red, wind-driven horses called Rohita, yoked to his chariot (i, 94, 10 ; ii, 6, 5 ; 10, 2 ; iii, 6, 6) which is variegated (x, 1, 5), and luminous (i, 140, 1 ; 141, 12 ; iii, 5, 3 ; v, 1, 11 ; x, 1, 5) like lightning (iii, 14, 1), he bellows like a bull (i, 94, 10, 11). His path and wheels are marked by blackness (ii, 4, 6 ; vi, 10, 4 ; vii, 8, 2 ; viii, 23, 19). His horses are butter-backed, wind-driven and active, and assume all forms (i, 14, 6, 12 ; 45, 2 ; 94, 10 ; 141, 12 ; ii, 4, 2 ; 10, 2 ; iv, 1, 8 ; 2, 2, 4 ; 6, 9 ; vi, 16, 43 ; vii, 16, 2 ; viii, 43, 16 ; x, 7, 4 ; 70, 2). His horses are said to have seven tongues (iii, 6, 2). He comes, seated in his car (iii, 4, 11 ; vii, 11, 1 ; x, 70, 2), to the sacrificial altar alone (x, 70, 2) or in company with other gods (i, 14, 12 ; iii, 6, 6, 9 ; viii, 64, 1).

Agni and his votaries.—Agni has taken up his abode among men as their guest or Atithi (i, 44, 4; 58, 6; ii, 4, 1; iii, 2, 2; iv, 1, 20; v, 1, 8; 8, 2; 18, 1; vi, 2, 7; 15, 1, 4; vii, 8, 4; viii, 73, 1; x, 10, 5; 91, 2; 92, 1). He is the lord, protector and leader of the people (i, 12, 2; 26, 7; 31, 11; 96, 4; ii, 1, 8; iii, 11, 5). He is their father, mother, brother, son and friend (i, 26, 3; 31, 10; 14, 16; 75, 4; 161, 1; ii, 1, 9; vi, 1, 5; v, 4, 2; viii, 43, 16; 64, 16; x, 7, 3). He is guardian and father, even of the weak (i, 31, 14) and accepts hymns even of the poor (i, 31, 13). He supports men (i, 59, 1 iv, 5, 1) and has 'grouped men in dwelling places' (iii, 1 17). He is their house-priest. He is called "Gr̥hapati" or master of the house (i, 12, 6; 36, 5; 60, 4; v, 8, 2 vii, 15, 2), "Viṣpati" or lord of men and rājā or king of men (i, 59, 5; ii, 1, 8; iii, 10, 1; v, 4, 1; vi, 7, 1; vii, 8, 1; viii, 43, 24).

His worshippers turn to him (x, 91, 3) with glad hearts (viii, 43, 31). They prosper and live long (vi, 2, 4, 5; 5, 5; 10, 3; 13, 4; 15, 11; vii, 11, 2; viii, 19, 5, 6; 44, 15; 73, 9). He is protector and friend of the man who serves him (iv, 2, 6; 4, 10; x, 79, 5). He gives him riches (i, 1, 3; 31, 10; 36, 4) and abundant food (i, 27, 7) and makes him unconquerable (viii, 23, 15) in battle. He preserves men from calamities (iii, 20, 4; v, 4, 9; vii, 12, 2). He is the source of all blessings (vi, 13, 1) and is like water in a desert (x, 4, 1). He satisfies his votaries with riches, food, deliverance, sons, etc. (i, 12, 8, 9; 36, 12; 58, 8, 9; ii, 4, 8; 7, 2, 3; 9, 5; iii, 1, 21; 16, 5; iv, 2, 20; 3, 14; 11, 6; v, 3, 11; vi, 1, 12; 4, 8; 5, 7; 6, 7; vii, 5, 13, 19). His worshippers prayed for his protection inside a house having hundred iron walls (i, 189, 2; vi, 48, 8; vii, 3, 7; 15, 14; 16, 10) and forgiveness for folly against Aditi (iv, 12, 4; vii, 93, 7) and Varuṇa (iv, 1, 4).

In vii, 19, 25 and 44, 23, his worshippers assured Agni of every help if they mutually changed their places. 'Let us be united with thy favour which bestows strength' is the prayer of the Seers (i, 31, 8) whose invocations the god hears (viii, 143, 23).

He is prayed to strike down the malevolent, the enemy of his worshippers (iv, 4, 4; vi, 8, 5; Av., iii, 1, 1; 2, 1; vi, 120, 1) in battle (vii, 43, 21; 73, 8; viii, 11, 8, 9). He saved Jaratkarna (x, 80, 2) and Atri when he fell in a hot well (x, 80, 2).

Agni as a physician.—In the following hymns we find references to the skill of Agni as a physician who cured diseases. In Ṛv., i, 12, 7, Agni is said to be the god who drives away diseases. Agni saved Dirghatamās, the blind son of Mamatā from distress (i, 141, 3; iv, 4, 13; MBH. I, 4179 *seq.*, ed. Calc.; Geldner, *Vedische Studien*, ii, 145). He is prayed to prolong life (i, 94, 16; iv, 12, 6) and he lengthened Praskanva's life that he may reach old age (i, 44, 6). In i, 189, 3, the poet prays: "Agni! Drive away from us all plagues;" and in i, 94, 15, he is prayed to grant sinlessness in health and wealth. In Ṛv., vii, 50, 2, Agni is prayed to remedy the poison Vandana which forms at the nodes of trees, and which causes swelling of knees and ankles. Agni is invoked to bestow a renowned son (v, 25, 5). In i, 71, 10, he is prayed to prevent old age. In Av., v, 28, 1: Agni is thus invoked: "Thou art a physician (bhiṣaj), a maker of remedy (bheṣaja); by thee may we gain cow, horse, man (purūṣa)"—Whitney. In 29, 13: we find a prayer: "Make him, O Agni, exuberant, sacrificial (medhya), free from Yakṣmā; let him live." In 30, 14: "With breath, O Agni, with sight unite him; associate him with body, with strength; thou understandest immortality (amṛta), let him not now go." The purifying property

of Agni is hinted at vi, 62: "Let Vaisvānara (Agni) by his rays purify us, the wind, lively with mists by his breath" (1.) "Take ye hold upon that (f) of Vaisvānara in order to splendour, becoming cleansed, clear and purifying." In Rv., iv, 12, 4, fire is said to purify as water purifies a man from dirt and sin. Agni is invoked for relief from insanity (vi, 111) and to put out snake's poison (x, 4, 26).

In vii, 1, 7, Agni is said to cure diseases by reducing high temperature. In vii, 1, 20, 22, he is prayed to purify our food. Prayers are offered to Agni to give his votaries productive virility (vii, 2, 9). He causes the women to deliver many heroic sons (x, 80, 1). Through his kindness Ṛṣi Numedha got a son (x, 80, 3).

In the Mahabhārata Agni is said to have cured indigestion of the gods and the Fathers, caused by eating excessive rice-offerings in Srāddha (Ānuśāsika Parvādhyāya, Ch. 92).

His character.—He is pure; he is truthful (i, 73, 2; 76, 5; vii, 7, 6). He is kind to his friends; and is always accessible to the poor. He is the upholder of religious order. He lights the earth, gives life and supports men. His deep sympathy for mortals at once destined him to surpass other gods and to become the popular god of the Vedic Hindus.

Agni is also invoked with other gods: especially with Indra as Indrāgni (i, 21; 108; 109; iii, 12, 25, 4; v, 27, 6; 86; vi, 59; 60; vii, 93; 94). They are both described as thunderers, slayers of Vṛttra (viii, 38, 4; i, 108, 3; Bergaigne ii, 295; viii, 8, 9) and shaker of cities (iii, 12, 4, 6; vi, 59, 3; 60, 3; vii, 93, 1-4; viii, 38, 2). In vii, 94, 7, they are prayed for help. They are called "Aśvina" or horse-men (i, 109, 4), the two "ṛtvija" or priests (viii, 38, 1), Indrās or the two Indras

and the two Agnis (vi, 60, 1). They are correlative deities and are conceived as one joint deity like the two Asvins.

Agni and Soma : i, 93.

Agni and Maruts : viii, 103.

Agni and Sun : x, 88.

Agni, Sun and Vayu : x, 136.

In the R̥g-veda the following hymn's are addressed to Agni :—

i, 1 ; 2 ; 13 ; 26 ; 27 ; 31 ; 36 ; 44 ; 45 ; 58-60 ; 65-79 ; 94-99 ; 127 ; 128 ; 140-150 ; 188 ; 189.

ii, 1-10.

iii, 1-29.

iv, 1-15.

v, 1-28.

vi, 1-16 ; 48, 1-10 ; 59 ; 60.

vii, 1-17 ; 50, 3 ; 93 ; 94 ; 104, 10.

viii, 11 ; 19 (except 26, 27, 34, 35) ; 23 ; 38 ; 39 ; 40 ; 43 ; 44 ; 56 ; 58 ; 60 ; 72 ; 75 ; 84 ; 102 ; 103.

x, 1-8 ; 11, 12 ; 15, 11-14 ; 16 ; 20 ; 45 ; 46 ; 53 ; 69 ; 79 ; 80 ; 87 ; 88 ; 91 ; 110 ; 115 ; 118 ; 122 ; 124 ; 125 ; 140 ; 142 ; 150 ; 156 ; 187 ; 188 ; 191, 1.

In a hymn to Agni, in the Mārkaṇḍeya Purāṇa, Sect. 99, vv. 52 ff, the seven tongues of Agni are thus described : (1) Kālī, the final destroyer, (2) Karālī, the cause of the great mundane dissolution, (3) Monojavā, the quality of lightness, (4) Sulohitā, accomplisher of the desire of creatures, (5) Sudhūmravarṇā, the inflietor of diseases on living beings, (6) Sphuliṅgini, the loveliest of all, 7. Viśvā, bestower of blessings on living beings. The seven shafts of Agni are also referred to in the 17th verse of this hymn.

In the Muṇḍuk Upaniṣad i, 2, 4, the seven flickering tongues of the fire are mentioned : Kālī (the black one),

Karālī (the terrific), Manojava (swift as mind), Sulohitā (the red one), Sudhūmravarṇā (of purple colour), Sphu-lingini (emitting sparks) and Viśvarūpi (all-shaped). Of these names, Kālī and Karālī are well known to us as the names of Siva's consorts.

In the Gṛhya Saṁgraha, (pp. 782-3), the seven tongues and their functions are described :

1. Karālī	for eating	Rākṣasas
2. Dhūmini	„ „	Asuras
3. Svetā	„ „	Nāgas
4. Lohitā	„ „	Piśācas
5. Maha Lolitā	„ „	Gandharvas
6. Suparnā	„ „	Yama
7. Padmarāga	„ „	Devas

VĀTA AND VĀYU.

The Vāta or Vāyu is the wind-god in the Vedas. He is often invoked with Indra (i, 2, 4; 14, 3; 23, 2; 135, 4). The three daily Soma oblations are made chiefly to Indra and Vāyu. There is some difference between Vāta and Vāyu: Vāta is the wind, and Vāyu is the wind-god. A similar differentiation also occurs in the case of the Sūrya, Sun and Savitā, Sun-girl. The Vāta is the same as the Scandinavian Woden. This deity, as it was known to the Iranians and Teutons, must be one of the primitive gods of the Aryans. The Greek and Latin names, Pan and Pavonius correspond to the Sanskrit word Pavana, another name of Vāyu. Vāyu is one of the god in the Zend Avesta, where he is prayed for by Thrataon (Sanskrit Traitān) for conquering Ajidathak (Ahi, Dahakin Sanskrit). —*Zend Avesta.. Ram Yastr.* Vāyu is the power or god at the back of the Vāta or wind. The Vāyu is the loftier spiritual conception of Vāta. But the terms used to describe Vāyu are also applied in reference to Vāta, the physical prototype of Vāyu. In i, 142, 12, Vāyu refers to the god, while in V, 19, 5, it represents the wind.

Vāyu is said to have sprung from the breath of Purūṣa (x, 90, 13). He is also described to have been generated by the two worlds (vii, 90, 13). The Vāyus are said to be the sons of Rudra (x, 93, 7). He is the son-in-law of Tvaṣṭā (viii, 26, 21, 22). He begets the storm-gods Maruts, (i, 24, 4) from the rivers of heaven. He is attended by Puṣān, Maruts and the Viśva-devas (i, 142, 12).

Most of the hymns simply invite Vāyu and Indra to come to sacrifice on the same chariot (iv, 46, 2; 48, 2; viii, 91, 5). Vāyu alone, or with Indra gets the first drink of the Soma juice (i, 134, 1; 135, 1, 4; 139, 1; ii, 41, 3; iv, 46, 1, 2; 47, 2; v, 43, 3; 51, 4, 6; vii, 90, 5; 91, 4; 92, 2; viii, 8, 26; 26, 23; x, 65, 9; 141, 4). Indra and Vāyu are popular gods. The spiritual exaltation of these gods over the material phenomena is characteristic of the atmospheric and earthly gods. They are invoked together to come quickly to the sacrifice (i, 2, 5, 6) and to drink Soma there (i, 2, 4).

According to Yāska (Nirukta, vii, 5), Agni is the representative of terrestrial gods; Sūrya, of celestial gods; and Indra and Vāyu, of the gods of aerial or intermediate sphere. They had different names according to their functions as Hotā, Adhvaryū, Brahma and Udgātā. In v, 41, 4, the Vedic triad is Fire, Wind, and Indra; (Trita of the sky) and in x, 158, ff. Sun, Wind and Fire form the triad (x, 136).

He is beautiful in appearance (i, 2, 1; vii, 26, 24). He rushes noisily (x, 100, 2). He is described to be swift, wise, and thousand-eyed; and with Indra he is spoken of as touching the sky (i, 23, 2, 3).

His shining car which touches the sky is made of gold (iv, 46, 3, 4). It is drawn by a pair of red or purple horses (i, 134, 3) or by several team of ninety-nine, or hundred, or thousand Niyuta horses (i, 134, 1; 135, 1, 3, 4; iv, 46, 2, 3; 47, 1; 48, 2, 4, 5; ii, 41, 1; vii, 91, 5; 92, 1, 5).

In the family books, the three complete hymns to Wind do not occur, and Indra is always associated with Vāyu in all the hymns (vii, 90-92; iv, 47-48). Similar association also occurs in i, 2, 4, 6; v, 51, 4, 6, 7, 10. In vi, 51, 12, he is associated with Soma.

HYMNS TO VĀYU.

Rv., i, 2, 1: Come, O Vāyu, worthy of sight! and
drink Soma juice.

2: The priests have prepared Soma and are
praying for you.

3: Your words describing the properties of
Soma juice go to the worshippers.

4: O Indra and Vāyu! Come hither. Drops
of Soma juice want you.

5: You know Soma juice. Come soon.

6: O ye two men! Come near to Soma.

184, 1: Let the swift Niyuta horses bring you
on your car first among the gods to
drink Soma. May you approve our
hymns.

2: May the delightful well-made Soma
drops please you. Your Niyuta horses
are bringing you to the altar. Your
votaries are expressing their wishes
before you.

3: Vāyu yokes two red horses to his chariot.
As a lover awakes his sleeping sweet-
heart, you awaken your votaries. You
display heaven and earth and brighten
Uṣā.

4: For you the bright Uṣā spread out beauti-
ful garments in their new rays. To you
cow pours out her riches. You have
brought Maruts from heaven.

5: From you the Soma rushed to waters.
You protect men from fear of evil
spirits and robbers.

- 6 : O Vāyu, you are worthy to drink Soma first. The cows pour out butter and milk for you.
- 135, 1 : O Vāyu, come on your thousand Niyuta horses and drink Soma. The gods are waiting for you.
- 2 : The Soma juice, purified and stimulating, men offer you; yoke your horses and go away, being delighted with us.
- 3 : The priests have prepared pure Soma, which is your due. Come to our sacrifice on your horses.
- 4 : You two, O Vāyu and Indra, come here with riches and drink Soma.
- 5 : You are giver of food; you come to drink Soma.
- 6 : This Soma, purified through a sieve, is for you.
- 7 : You both go to the house where Soma is being prepared, hymns are chanted, and *ghee* is flowing.
- 8 : You accept the oblations in this sacrifice. Cows are giving milk. May they not be weak and destroyed.
- 9 : The young, strong and swift horses are carrying you. It is difficult to stop their motion.
- 164, 44 : Three hairy beings annually inspect this earth in proper time. One shaves the earth (Agni); a second, acts as her overseer (Sun); and the third, is seen by his motion, his form is never seen (Vāyu).

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- iv, 46, 1 : Do you drink soma in this sacrifice as
you are the first drinker.
- 2 }
to } : Hymns to Indra and Vāyu.
7 }
- 47 : " " "
- 48, 1 : Come here on your chariot to drink
Soma.
- 2 : Indra is your charioteer, come to
drink Soma.
- 3 : The Earth and Heaven follow you,
come, etc.
- 4 : May ninety-nine swift horses carry
you, come, etc.
- 5 : Harness hundred or thousand horses to
the chariot.
- v, 51, 4-7 }
10 } : Hymns to Indra and Vāyu.
- 12 : Hymns to Vāyu and Soma.

HYMNS TO VĀTA.

- Rv., i, 186, 10 : Vāta, like Viṣṇu, is free from
malice.
- viii, 26, 20 : Harness your two horses and then
come here to drink Soma.
- 21 : O Vāyu, the son-in-law of Tvastā,
the lord of sacrifice, may we be
maintained by you.
- 22 : I pray Vāyu, the son-in-law of
Tvastā, for riches.
- 23 : You bear the goodness of Heaven.
Harness the horse to your
chariot.
- 24 : You are beautiful. I pray you to
come here.

- 25 : You are the chief among the gods ;
may you grant us food, water
and work.
- 46, 25 : You are giver of riches and
strength, I pray you.
- 26 : Drinker of shining and purified
Soma.
- 27 : You, Pṛthuśravā, wished to give
me riches and so ordered your
managers Aradva, Akṣa,
Nahuṣa, and Sukṛta.
- 28 : The pure King, greater than
Ucatya and Vapu, has sent
us food on the back of horse,
camel and dog, through your
kindness.
- 32 : I am a Brahman, I am keeper of
of cows and horses. I take
a hundred from the slave
Valvatha. These creatures
belong to you.
- 101, 9 : You come to our sacrifice. The
white Soma in the sieve is
for you.
- 10 : O Vāyu with Niyuta horses, the
Adhvaryu is carrying butter
and Soma for you.
- x, 136, 2 : The Munis of Vātaraśana family
became gods and followed
Vāta.
- 3 : We are mad after religious austeri-
ties ; we raise ourselves upon
Vāta. The men see our bodies
only.

- 5 : The Muni is like a horse of Vāta,
a companion of Vāyu. He is
liked by the Devas.
- 7 : When Keśi drinks water with
Rudra, Vāyu moves the
water and breaks the hard
snow-balls.
- 137, 2 : The two Vātas blow even beyond
the seas. Let one come to
make you strong and let the
other flow to destroy your
sins.
- 3 : O Vāta, blow medicine towards
this side. What is harmful
take away hence. You are
medicine in this world. You
are messenger of the gods.
- x, 141, 4 : It is a pleasure to invoke Indra,
Vāta and Vṛhaspati ; may they
be pleased to grant us riches.
- 5 : Excite Vāta, Viṣṇu, Indra to
generosity.
- 168, 1 : The chariot of Vāta goes thunder-
ing through the sky creating
redness, or scattering the dust
of the earth.
- 2 : The gusts of wind go towards the
god who accompanies them
on the same chariot as the
king.
- 3 : He never rests when he moves in
the sky. He is friend of waters
and is the first-born. Where
was he born ?

4 : He is the breath of the gods,
the germ of the world. His
roars are heard, but his form
is not seen. Let us worship
him.

186 : 1 : The Vāta wafts as a medicine.
May he be propitious and
delightful.

2 : You are our father, brother, and
friend. Do thou allow us to
live !

3 : From the treasure of immortality
which is in your house, give us
immortality, give us life.

Śat. Br., xi, 2, 3, 1 : Brahma placed Vāyu in the atmos-
phere.

vi, 1, 2, 1 : Prajāpati connected himself as
Agni with the Earth ; from
this union sprang an egg, and
thence Vāyu ; next through
Vāyu he united himself with
the Air (Antarikṣa, neuter), and
again an egg was produced,
and thence Āditya (Sun)—
Muir.

Nirukta, vii, 5 : There are only three deities : Agni
on earth, Vāyu or Indra in the
atmosphere, and Sūrya in the
sky. They receive many
appellations according to their
functions.

Authorship : Vāyu is not known as the author of any medical book. He is said to have narrated the Vāyu Purāṇa consisting 24,000 ślokat :

श्वेतकल्पप्रसङ्गेन धर्मान वायुरिहाव्रवीत् ।

यदेतन्नायवीयं स्यादुद्रमाहात्म्यसंयुतम् ॥

चतुर्विंशं सहस्रानि पुराणं तदिहोच्यते ।

He is also the speaker in the Śiva Purāṇa, which is also said, according to the Bhāgavat Purāṇa, to consist of 24,000 ślokas.

CHAPTER VI.

VRHAŚPATI.

Vṛhaśpati is the same god as Brāhmaṇaśpati, the lord of Brahma or prayer (i, 40, 5; ii, 23, 1, 2; x, 98, 7). Hillebrandt identifies them with Moon; and Muller, with 'Agni' or Fire as Vṛhaśpati is red and golden, and considers the two gods as varieties of Agni. Roth considers them as "Lord of Prayer" or as "impersonation of the power of devotion" as Muir puts it. Hopkins supports Roth with the modification "as the priestly abstraction of Indra," or as a "sacerdotal Indra." Weber holds the same view (Vājpeya Sacrifice, p. 15). Langlois considers Vṛhaśpati and Brahmaṇaśpati as names of Agni (Trans. of Rv., Vol. I, pp. 249, 254, 578, notes, and Index, Vol. IV). Wilson also identifies Brahmaṇaśpati with Agni (Intro. Trans. Rv., Vol. I, p. xxxvii; ii, 1, 3, 2; iii, 26, 2; v, 43, 12), and Vṛhaśpati with Indra (Intro., Vol. II, p. ix) as he sends rain and recovers cows, etc. (see also II, 30, 4). Sometimes he is looked upon as a minor god (Rv., i, 190).

His parentage.—Vṛhaśpati is known to us as an ancient Ṛṣi or sage, the son of Aṅgīrasa (iv, 40, 1; vi, 73, 1; x, 47, 6; 68, 2) and the preceptor of the Devas. He is the younger brother of Utathya. He is also said to be the offspring of the two worlds (vii, 97, 8), and the son of Tvaṣṭṛ (ii, 23, 17). He composed hymns in the Vedas (Rv, 71; 72). "Another Vṛhaśpati is known as the author of a "Dharmaśāstra" or "Law Book" and the founder of the Vārhaṣpatya School (4th century B.C.). There was also an author of some minor "Jyotiṣa" or "Astronomical Tracts"; and other obscure authors of that name are also known. See Aufrecht's *Catalogus Catalogorum*."

There is no Vṛhaspati known to us as the author of any medical text book, though in the Bower MS. the following formula is distinctly ascribed to him :—

निर्मुसल चक्रहलशब्दाभिहतायाम् भूमौ जातमाश्वगन्धाम् ससुलपत्रपुष्पम् सूक्ष्म-
चूर्णाणि कुर्यात् । ततः सर्पिषा विडाल पादकमाहृत्याहनि लिहयेत् पयश्चानुपिवेत्
जोर्नान्ते पयसा भोजनमाश्रीयेत् ॥ एवं एकविंशतिरात्रं बलवान्बृच्छवीरश्च भवत्याह
ब्रह्मपतिरिति । ब्राह्मण्यम् ब्रह्मत्करणम् ।

A Prescription of Vṛhaspati for Promoting Bulkiness¹ :—

“Take Aśvagandhā wine (*Withania Somnifera*) with its roots, leaves and flowers, grown in ground undisturbed by the sound of ploughs, or the din of battles fought with clubs and discusses and make it into fine powder. Of this, one may take a Viḍālpada, every day, as a linctus with clarified butter, and follow it up with a drink of milk. When it is digested, one should eat one's food with milk. By continuing this treatment for a period of twenty-one nights (or three weeks) a person will become strong and stout: so says Vṛhaspati.”

In Cakra Datta, Sureśvara Gṛtha is ascribed to Jīvaka; and by Jīvaka, Śivadāsa, the commentator, means Vṛhaspati, (जीवो ब्रह्मपति स्तार्थकः). Jiva is no doubt a synonym of Vṛhaspati, but it seems, however, to be a far-fetched explanation. It really refers to Jīvaka, the well-known Buddhist physician who flourished when the Venerable One preached.

The medical skill of Vṛhaspati, however, is referred to in unmistakable language in the Rāmāyana, Yuddhakāṇḍa, Ch. 50. There Suṣeṇa is reported to have said :

तदा अ दानवा देवान् शरसंस्पर्शकोविदान् ।

निजघ्नः शस्त्रविदुषश्चादयन्तो मुहुर्बाहुः ॥

¹ Bower, MS., p. 149. Prose, 781-785.

तान्नात्तात्रटसंज्ञाय गताम्श्च ब्रह्मतिः ।
 विद्याभिर्मन्त्रयुक्ताभिरोषधीभिश्चिकित्सति ॥
 तान्बौषधान्यानयितुं क्षीरोदं यान्तु सागरम् ।
 जवेन वानराः शैत्रं सम्पातिपनसादयः ॥
 हरयस्तु विजानन्ति पार्वती ते महीषधी ।
 सक्षीवकरणीं दिव्यां विशल्यां देवनिर्मिताम् ॥
 चन्द्रश्च नास्ति द्रोणश्च क्षीरोदे सागरोत्तमे ।
 अमृतं यत्न मयितं तत्र ते परमौषधी ॥
 तौ तत्र विहितौ देवैः पर्वतौ तु महोदधी ।
 अयं वायुसुतो राजन् हनुमांस्तव गच्छतु ॥

Relationship with other gods.—He is said to be the father of the gods (ii, 26, 3) and to have 'blown forth the births of gods like a blacksmith' (x, 72, 2). With Indra he lead armies in battle. Vṛhaspati and Brāhmaṇspati are the names of the same god; and as such they have been identified with Agni. But Agni is mentioned separately from both these gods in Rv., iii, 20, 5; iv, 40, 1; v, 51, 12 ff; vii, 10, 4; 44, 1; ix, 5, 11; x, 35, 11; 65, 1; 68, 9; 130, 4; 141, 3.

His acts.—To Vṛhaspati, 'the lord of strength,' are attributed many deeds of Indra. He breaks the cloud-demon's power with sharp bolt, releases the imprisoned waters of the sky, and so pours water to fertilise the earth; dispels darkness (x, 68, 5); breaks through the caves of, and destroys, Vala, and rescues and carries off the well-formed heavenly kine with milk (x, 68, 3) from the mountains (x, 68, 3, 4), gives offsprings and riches to worshippers, and helps them in battle (vii, 13, 2); discovers Uṣā or Dawn and Agni; and keeps a band of singers like Maruts. He rescued Trita from a well (i, 105, 17), killed Samvara (ii, 24, 2), composed many Rks before, and now resides in clouds (x, 68, 12). He is the

prototype of the priestly order and is the Purohita of the gods (x, 11, 1, 3).

Relation with the worshippers.—He protects the pious from calamities (ii, 23, 4, 5) and blesses them with wealth and prosperity (*Ibid*, 9 f).

His attributes.—He is divine (iii, 62, 4; iv, 50, 6), bright (iii, 62, 5; viii, 97, 7), pure (vii, 97, 7) and omniform (iii, 62, 6). He has hundred wings (vii, 97, 7). He is clear-voiced (vii, 97, 5), opulent and increaser of nutriment (i, 8, 2).

His arms.—He carries a golden spear (vii, 97, 7), has his bow and arrow (ii, 24, 8) and is described as armed with an iron axe which Tvaṣṭr sharpens (x, 53, 9). Swift ruddy horses are said to carry him (vii, 97, 6).

His sons.—Bharadvāja was his son. So were Kaca and Saṁyu Ṛṣi who composed many hymns in the Ṛgveda (vi, 44; 45; 48).

In the Ṛgveda the following hymns are addressed to Vṛhaṣpati and Brāhmaṇaspati:

- i, 18, 1: Prayer to Brahmanaspati to make the worshippers famous like Kakṣivān, the son of Uśija.
- 2: He is opulent, remover of disease, bounteous, and increaser of nutriment.
- 3: May you protect us from blasphemy of men.
- 4: The men whom Indra, Brahmanaspati and Soma favour, can never be destroyed.
- 5: May you, Soma, Indra, and Dakṣiṇā, protect men from sin.

- 6: I have prayed for intelligence
from Agni (Sadasampati).
- 7: He exists in association of our
thoughts.
- 8: He performs ceremonies successfully
and through him our hymns
reach the gods.
- 9: I have seen the powerful and famous
Narasāmsa.
- 40, 1: Rise Brahmanaśpati, we pray you.
O Indra, drink Soma juice
with him.
- 2: O Son of Strength! Men pray you
for riches.
- 3: May Brahmanaśpati, goddess Sunṛti
come here. May gods drive
away our enemies.
- 4: We shall pray Ilā for the man who
pays riches to Ṛtvija.
- 5: Brahmanaśpati has uttered a hymn
in praise of Indra, Varuṇa,
Mitra and other gods.
- 6: May we utter it on the festivals.
- 90, 9: May Vṛhaśpati be a source of happi-
ness for us.
- 190, 1: I magnify Vṛhaśpati, the sweet-
tongued, the leader of songs.
- 2: To him proceed well-ordered words.
He is born for ceremonies.
- 3: He tries to secure prayers from, and
rice and gifts for the worship-
pers.

4: He makes all living beings conscious. His arms go towards the enemies.

5: The sinners who compare Vṛhaṣpati to a decrepit bull must not be given riches.

6: You are friend of pious worshippers and kings.

7: All hymns meet with you.

8: The great Vṛhaṣpati is born for the good of many men. If we pray, he will grant us food, strength and long life.

ii, 23, 1: Brahmanaspati, renowned of sages, monarch of prayers, help us.

2: Vṛhaṣpati, the generator of all prayers.

3: He overcomes demons and darkness.

4: Preserves men from the enemy of devotion.

5: Preserves them from calamity.

6: Homage to the wise Vṛhaṣpati, our protector and guide.

7: Turn away mortals who are hostile to us.

8: As protector of our bodies, destroy the revilers of gods.

9: May we acquire riches. Crush our foes.

10: May we obtain the highest vigour.

11: You are a real avenger of guilt and subduer of foes in battle.

12: Preserve us from the shaft of the malicious man.

- 13: You are to be invoked in battles and
to be worshipped with rever-
ence, you have overturned our
enemies.
- 14: With your sharp burning bolt,
destroy the Rakṣasas.
- 15: Prayer for wealth.
- 16: Prayer for protection from robbers.
- 17: Tvaṣṭṛ generated you, the upholder
of ceremonials.
- 18: You, Aṅgīrasa, opened the cow-
pen; with Indra's help, you
let loose the stream of water.
- 19: May we, blessed with strong men,
speak with power at the
festivals.
- 24, 1: We worship you with a new song.
Fulfil our desires.
- 2: Brahmanaspati has split open the
clouds and the mountains full
of riches.
- 3: By prayer he split Vala, dispelled
darkness and revealed the sky.
- 4: He split open the stone-covered
fountain of sweet water,
which, having been drunk by
the rays of the sun, reappears
as rain-drops.
- 5: He has opened the gates of rain for
all time for the worshippers.
- 6: The learned Aṅgīras found out the
Panis hidden in a fort.
- 7: They hurled fire against the
mountain.

- 8: Brahmanaspati with his bow and arrows gets his desired objects. Those arrows (*mantra*) are to be seen and heard.
- 9: He is the priest. All men adore him.
- 10: His riches are scattered every where and are accessible to all.
- 11: He protects all men. The bounteous god is the representative of all the gods.
- 12: O Indra and Brahmanaspati, you are opulent. Come to our sacrifices.
- 13: His swift horses are hearing our hymns as sung by our priests.
- 14: He rescued the cows.
- 15: You are the lord over all. May our heroic sons be father of sons.
- 16: You are the lord of this world. May we thus magnify you with our sons and grandsons.
- 25, 1: The friend of Brahmanaspati lives beyond the age of his grandson.
- 2: He is famous for the cows. The progeny of his friend become rich.
- 3: His votary conquers his enemy.
- 4: His friend gets heavenly water and cows, and conquers his foes by force.
- 5: His friend becomes happy.

- 26 : 1 : May his worshipper kill his foes.
 2 : O hero, you pray Brahmanaspati
 and start for war against your
 enemies.
 3 : The votary who serves Brahma-
 naspati, the father of the gods,
 gets food and riches for him-
 self and his sons.
 4 : The god rescues his votary from
 sins, enemy and poverty.
 30, 4 : Vṛhaspati and Indra are identified
 and prayed to kill Asura's
 sons.
 9 : Prayer to king Vṛhaspati to kill
 the hidden foes by the thunder-
 bolt.
 iii, 62, 4 : May Vṛhaspati, the benefactor of
 the Devas, give us riches.
 5 : Worship the pure Vṛhaspati with
 prayers.
 6 : I pray him to fulfil my desire.
 iv, 49, 1 : I throw Soma on your mouth, O
 Indra and Vṛhaspati.
 2 : Soma is given for your drink and
 pleasure.
 3 : Come ye to our house to drink
 Soma.
 4 : Give us riches consisting of a
 hundred cows and a thousand
 horses.
 5 : We are inviting you to drink
 Soma.
 6 : You drink Soma and be pleased to
 live in our house.

v, 42, 7 : Pray Vṛhaspati the giver of riches ;
he makes the worshippers
happy.

8 : When you protect men, their
enemies become powerless ; and
they get riches and sons. May
the giver of horse, cow and
cloth get riches.

9 : May those, who enjoy happiness
but do not make others happy
and observe ceremonies, be
deprived of the Sun.

43, 12 : Worship the wise, butter-backed,
mighty, golden-hued, ruddy
god who shines in our house.

v, 50, 1 : The ancient sages placed the
pleasant-tongued Vṛhaspati in
front. He occupies three
abodes and holds apart the
ends of the world.

2 : You protect the sacrifices of your
votaries.

3 : Around you, prayers and Soma are
offered.

4 : When first born in the sky, he had
seven mouths and he dispelled
darkness.

5 : He killed Vala and rescued the
cows.

6 : We shall worship our father
Vṛhaspati. May we be rich
and heroic with noble sons.

7 : The king who prays him conquers
his enemy.

- 8 : The king, to whom Brahmanaspati goes first, finds his subjects obedient.
- 9 : The king who gives riches to Brahmanaspati gets riches from his enemies and subjects.
- 10 : O Vṛhaspati and Indra, drink Soma and give us riches with progeny.
- 11 : O gods, ye help us with your kindness. Protect our sacrifice and fight with our enemies.
- vi, 45, 31 : Vṛbu sat on the high banks of Gaṅgā among the Panis.
- 32 : I crave for riches. He gave me thousand cows.
- 33 : We always magnify Vṛbu.
- 47, 20 : O Vṛhaspati, guide us in our search for cows.
- 73, 1 : Vṛhaspati, the breaker of mountain, the first-born, the truthful, Aṅgira, our father, thunders as he rains.
- 2 : He kills Vṛtra and enemies.
- 3 : He has secured riches and cows, and has killed the enemy of heaven.
- 75, 17 : May Brahmanaspati and Aditi make us happy in the battlefield where arrows are falling.
- vii, 97, 10 : Vṛhaspati and Indra are the lords of earthly and heavenly riches. May both of you bestow riches on the worshippers.

- 2: May we prove innocent before
Vṛhaspati, the giver of riches.
- 3: I magnify Brahmanaspati, the
eldest of the gods. May the
ślokas worship the great king
Indra.
- 4: May Brahmanaspati the adorable,
come here.
- 5: We shall worship Vṛhaspati, with
his pure hymns.
- 6: May the bright horses bear Vṛhas-
pati.
- 7: Vṛhaspati is pure, sweet-tongued
and is the giver of food.
- 8: He is the son of Earth and
Heaven; magnify him. He
has made water fluid.
- 9: For Brahmanaspati and Indra we
offer this prayer. Kill the
army of our foe.

vii, 98, 7: Same as above.

x. 67, 3: Vṛhaspati opened the door of stone.
The imprisoned cows loudly
bellowed.

- 4: He opened three doors of the cave,
one below and two above, and
rescued the cows.
- 5: During night he broke the cave
and opened the three doors, and
saw the sun and the cows in
the morning.
- 6: Indra killed Vala by his shouts.
He rescued cows from Pani.

- 7: He killed Vala, and Brahmanaspati took possession of the cows.
 - 8: They thanked the god presiding over cows. Vṛhaspati brought out the cows.
 - 9: Let us magnify Vṛhaspati when he comes to the sacrifice.
 - 10: When Vṛhaspati gave various foods, the intelligent magnified him.
 - 11: May my prayer for food be granted; I am your votary; give me shelter and kill my foes.
- 68, 1: Prayers were offered to Vṛhaspati.
- 1: He, the son of Angirā, brought our cows to light.
 - 2: He brought forth cows from mountain.
 - 3: He drove away cows which broke the surface of earth.
 - 4: Dispelled darkness and drove forth cows from Vala.
 - 5: He clove the defences of Vala and revealed the cows.
 - 6: He drove out the cows from the mountain.
 - 7: He found out sweet water covered by rocks.
 - 8: He discovered the Dawn, the Sky and Agni; dispelled darkness, and killed bull-shaped Vala.
 - 9: He seized all the cows. The Sun and the Moon again appeared.

- 11 : The father-like Devas formed the starry heaven and ordained darkness for night and light for day. Vṛhaspati rescued the cows by breaking the mountain.
- 12 : He composed many hymns. He now resides in heaven. May he grant as cows, horses, servants and food. We salute him.
- 98, 1 : O Vṛhaspati ! For us you go to each god. Whether you be Mitra, or Varuṇa, or Puṣā, or Ādityas, or Indra with the Vasus, you pour rain for Sāntānu.
- 2 : O Vṛhaspati come to us as messenger from Devāpi.
- 3 : May we compose a bright hymn for you, so that rains may fall on earth.
- 4 : Vṛhaspati gave Devāpi a hymn for causing rain.
- 100, 5 : Vṛhaspati is the giver of life.
- 108, 6 : O Panis ! Vṛhaspati may inflict pain on you.
- 11 : Vṛhaspati, Soma, have found out the hiding place of the cows.
- 109 : Vṛhaspati divorced his wife Juhu, but being told by the gods and kings that she was a chaste lady, he took her as wife again.
- 141, 2 :
 3 : } —Vṛhaspati and Brahmanaspati
 4 : } are mentioned.
 5 :

- 155, 2 : O spirited Brahmanas̥pati ! come
here after driving away Alaks̥ī
(misfortune).
- 164, 4 : O Indra, O Brahmanas̥pati !
may you protect us from sins
committed by us.
- 182, 1 : O Vṛhas̥pati ! destroy our sins,
cure the diseases of the wor-
shipper and prevent his fear.
- 2 : May Naras̥msa protect us.
- 3 : May Vṛhas̥pati cause death of the
envious Rāk̥sasas.

In the Atharva Veda we find references to Vṛhas̥pati
as a god of medicine :

- Av. v, 25, 11 : Thine embryos let god Vṛhas̥pati place,
etc.
- v, 26, 12 : He is often invoked at sacrifices.
- vii, 53, 1 : " Vṛhas̥pati, thou hast delivered us
from dwelling in the realm of
Yama, from the curse."
- x, 6, 11 : } The healthful amulet of Vṛhas̥pati is
12 : } referred to. It is said to have
yielded the Aśvin twins great-
ness

UṢANĀ.

Usanā is the name of Śukrācārya, the preceptor of the demons. He was the son of the great Ṛṣi Bhṛgu. He is said to have possessed the mystic power of restoring the dead to life. This power Kaca learned from him (see Kaca). He is said to have become blind of one eye for his objection to the gift of king Vali to Viṣṇu.

He had two sons, Śanda and Amarka, and one daughter Devayāni. His daughter fell in love with Kaca, the son of Vṛhaṣpati, but her offer was not accepted as Kaca considered her to be his sister, being the daughter of his preceptor. She was afterwards married to King Yayāti, who was cursed by the sage to become old as Devayāni complained to her father against him for having secretly married her maid Sarmiṣṭhā, the daughter of Dānva King Vṛṣaparva. Yayāti requested his sons to take his old age in exchange of their youth, but the four elder sons refused, and the youngest, born of Sarmiṣṭhā, consented. His father enjoyed his youth, and after many years, made Puru his heir to the throne.

“Usanas, with the patronymic *Kāvya*, was an ancient Ṛshi or ‘Sage’ who was the preceptor of the asuras or daityas, the opponents of the dēvas. As such he is always represented, in antagonism to Indra, the chief of the dēvas. It is curious that here the composition of a remedy which was a favourite with Indra is ascribed to him. It is curious also that both he as well as Vṛhaṣpati, the preceptor of the dēvas are named as author of medical formulæ. To both the composition of *mantra* or ‘charms’

and 'maya' or 'rules of conduct' are ascribed in the Mahābhārata, and there is an antitonic charm, called *Uṣanaḥ-stoma* or Uṣanas' hymn (see the large Petersburg Dictionary). But there is no Uṣanā known as the author of any medical work, though there exists an author, with that name, of a *Smṛiti* or 'law-book' (see Aufrecht's *Catalogus Catalogorum*)”¹

Uṣanā in the. Bower Ms., Part II. 846b-847a, p. 65.

INDRAPRIYA PAYA.

इन्द्रप्रियः पयः ।

पयः पिवेत राजन् यः कृत्स्नाम् जागर्त्ति वेगवान् ।

शर्करामधुदुग्धाच्च घृतम् चिकटुकम् सरः ॥

शतमेकधमेतद्वै पिवेदिन्द्रप्रियं पयः ।

अश्विनसो योगः इन्द्रप्रियः ॥

The Indrapriya prescription, by Uṣanas (846b and 847a): sugar, honey, milk, clarified butter, the three aorids, and water : all these should be boiled together, and may then be taken as the Indrapriya or potion 'beloved by Indra.'

Indra and Uṣanā are said to have entered the house of Kutsa to kill suṣṇa (Rv., v. 29. 9).

¹ Bower MSS., foot-note 332, p. 157.

CHAPTER VII.

AGASTYA.

In the *R̥gveda*, Agastya appears as the author of several hymns and is said to be the son of Mitra and Varuṇa (and so called Maitra-Vāruṇi Aurvaśīya) whose seed fell from them at the sight of Urvaśī. Sāyaṇa says that he was born in a water-jar (therefore called Kalasīsūta, Kumbha-Sambhava and Ghaṭodbhava). He was called Māna as he was only a span in length when he was born, Agastya and Vindhyakūṭa from his having commanded the Vindhya mountains to lower their heads, Pītāb̥dhi and Samudra-chuluka or "ocean-drinker" from his drinking up the ocean. His other names are Āgneys, Āgnimāruta and Agasti. He is said to have eaten Ātapi and Vātapi asuras, so called Vātapidvit. He is the regent of the star Canopus and is the narrator of *Brahma-Purāṇa*. His wife was named Lopamūdrā—a girl formed by him out of the distinctive beauties of different animals, as narrated in the *Mahābhārata*. In the *Rāmāyaṇa* he appears as the chief of the hermits of the South. He kept the Rākhasas under control and helped Rāma in his exile, by presenting him the Vaiṣṇava Bow, two inexhaustible arrow-cases and other weapons of war.

He is "venerated in the South, as the first teacher of science and literature to the primitive Dravidian tribes" and "we shall not greatly err in placing the era of Agastya in the 7th or at least in the 6th century B.C." (Caldwell). Wilson also thinks him to be "instrumental in the introduction of the Hindu religion and literature into the Peninsula."

His works : 1. The Asuras used to conceal themselves in the ocean, and the Devas were unable to kill them. Agastya drank up the ocean and thus exposed the Asuras before the Devas who killed them.

2. He married Lopamudrā who was brought up in the house of King of Vidarbha. To satisfy her he went out in search of money. He went to three kings, but failing to collect the whole amount from them, he next went to Ilvala, King of the Dānavas. To kill his guests, Ilvala gave them flesh of deer to eat. The deer was his brother Vātāpi. The sage in anger ate the flesh [and digested Vātāpi. Ilvala then gave him the money.

3. He was the preceptor of the Vindhya mountains. Vindhya requested the sun to turn round him but was refused. The mountain thereupon began to grow higher and higher to obstruct the sun in his daily course from east to west. The devas requested Agastya to interfere. He reached the Vindhya mountain, and as Vindhya lowered his head to salute his preceptor, Agastya ordered him to remain so till he comes back from the South. The sage never came back.

4. King Nahuṣa, son of Āyus, and fifth in descent from Soma, through self-conceit, engaged great sages to bear his vehicle. By his gaze, he could rob any one of his energy. He touched with his foot Muni Agastya who was carrying him. Agastya cursed him : " Fall, thou serpent." He appeased his anger. Agastya told him to wait till Yudhiṣṭhira would free him from the curse. Another account says that Bhṛgu who was concealed in Agastya's hairs, cursed Nahuṣa. (Mahābhārata, Adiparva, 3151; Vanaparva, sect. 180; Udyogaparva, sect. 10-16; Anusāsana Parva 4745-4810).

Books :—

1. Dvaidha-Nirṇaya : As a medical author, Agastya is mentioned in the Brahmayaiavartta Purāṇa to have written a treatise on medicine, called “ Dvaidha-Nirṇaya ” or “ Solution of Difficulties.” It is not available now.

2. In the Rudantikālpa, Agastya is said to have prayed the sage Vasiṣṭha to lecture on medicines for the good of men :

Ms. :—GOML 13212. Rudantikālpah.

On the preparation of a medicine from the leaves of a plant named Rudanti.

Beginning :

केलासशिखरे रम्ये वेदवन्दनिषिविते ।
वसिष्ठं सुनिशार्दूलमगम्यः परिप्रच्छति ॥
 दारिद्रादुःखमज्ञानं मृत्युव्याधिः प्रदर्शितम् ।
 मनुष्याणां हितार्थाय औषधं कथय प्रभो ॥

इश्वर उवाच—

साधु साधु महाप्राज्ञ सर्वसत्त्वहिते रत ।
 कथयामि यथातथ्यं मृत्युदारिद्रानाशनम् ॥
 औषधीं शृण्वन्मां चेमां मातेव हितकारिणीम् ।
 रुदन्ती नाम विख्यातं तां मृत्युदारिद्रानाश(नी)म् ॥

End :

ग्रहनागपिशाचा वा यच्चराक्षसमर्दनात् ।
 विषलेपेन सर्वेषां प्रीत्या विषाणि भवन्ति हि ॥
 चणककलाः खदिरमात्रं विचित्रापचाणि ।
 सितपीतरक्तकणाः भूमिसमो भवति ॥

Colophon :

इति रुदन्तीकल्पसम्पूर्णः ॥

The Formulæ ascribed to Agastya :—

1. A purgative by Agasti— Bower Ms. I, vv. 61-67.
2. Agastya Haritakī Avaleha I. { G. N. Vol. I, p. 145.
Śa. Ś. II, 8, p. 144.
3. „ „ „ II. ... G. N., pp. 144-5.
4. Agasti Haritakī ... V. K. V., p. 147.
Agasti Rasāyaṇa ... A. H. S., IV, p. 80.
5. Agastya Avaleha { S. S., VI, li.
Agastya Abhayā Avaleha { Śataśloki, p. 26.
6. Agasti Rasa ... R. C., ix, p. 115.
7. Sūraṇa Vatikā ... G. N., pp. 108-9.
8. Maha Lakṣmī Vilāsa Rasa
(used by Kṛṣṇa) ... Saṁkṣiptasāra, p. 33.
9. Vṛhat Viṣṇu Oil ... Do., p. 58.
10. Bhīma Vaṭaka ... H. S. III, xii, p. 205.

1. AGASTYA'S PURGATIVE.

चित्रकाङ्ठं पलम् मूलात्तृहृत्शातलयोस्तथा ।

+म् दन्तिमूलानाम् कर्षाम् कर्षम् पृथक् पृथक् ॥

पिप्पल्याः सेन्धवाच्छैव तथा हिम्वस्मन्नुवेतसात् ।

विंशतिश्चाभया मुख्या + + विपाचयेत् ॥

गुडस्राष्टपलात् सम्यक् कुर्वीत दशमोदकान् ।

फकैकम् भक्षयेत्तच्चाद्दशमे दशमेऽहनि ॥

दोषाणाम्पाचनार्थाय जलमुष्णम् पिवेदनु ।

विरेकांति ततः स्नात्वा सात्त्वाग्रसत्रं प्रयोजयेत् ॥

नात्र कश्चित् परिहारो वाक्कायमनसाम् सदा ।

सर्व्वर्तुको नरेन्द्राणाम् विरेकोऽगस्ति निर्मितः ॥

जरा-मृत्यु प्रमथनः सर्व्वामय विनाशनः ।

ब्रूथो रसायनश्चैव मेधायोग्याभिवर्द्धनः ॥

नापुत्राय प्रदातव्यो नाग्निष्याय कथञ्चन ।

राजहिष्टे न दातव्यो ये चान्येपापचारिणः ॥

Bower MS. (61-67)

“Boil half a pala of the root of Chitraka (*Plumbago Zeylanica*), likewise of Trivrit (*Ipomæa Turpethum*) and Sâtalâ (*Stereospermum Suaveolens*), and one karsha, each of the roots of Danti (*Baliospermum Montanum*) and, and likewise of long pepper, rock-salt, asafætida and Indian sorrel and 20 of the best chebulic *Myrobalans*,..... From these carefully prepare 10 boluses with 8 pala of treacle, and take one of them on every 10th day. After it one should drink warm water for the purpose of correcting the defects of the humours; and then, after the purgative has taken effect, one should bathe and may then return to one's ordinary diet. There should never be any hesitation with regard to this remedy either in words or deed or thought. It is a purgative composed by *Agasti*, fit for princes, and which can be used in all seasons. It prevents old age and death; it cures all diseases; it also acts as an aphrodisiac and alterative tonic, and increases memory and health. It should never be administered to any one who has no son nor disciple; nor should it be given to an enemy of the king, nor to any other sinful liver.” Bower Ms., p. 17.

2. AGASTYA HARITAKI AVALEHA I.

अगस्त्यहरीतक्यवलीहः ।

द्विपञ्चमूलभक्षणामगुप्ताभर्गीशठीपुष्करमूलविश्वः ।

पाठान्ताग्रन्यिक शङ्खपुष्पौरास्त्रान्यपामार्गवलायवासाः ॥

द्विपालिकास्तत्र यवाढकं च हरीतकीनां च शतं गुरुणाम् ।

द्रोणे जलस्याढकसंयुते तु कायीकृते पूतचतुर्थभागे ॥

पचेतुलां यज्ञगुडस्य दत्त्वा प्रयक्त्स्तेलात्कुडवं घृताञ्च ।

चर्षं च तावन्मगधोद्भवानामनेकरीगौषमथाशु हन्यात् ॥

तद्राज्यस्त्रयहृषीप्रदीपशोफाग्निमान्द्यस्त्रमेदकासान् ।

पाण्डूमान्यश्वासशिरोक्षिरोगाग्नेद्रोगहिक्काविषमञ्चरांश्च ॥

मेघवलीहामतिप्रदं च चकार चैतद्भगवानगस्त्यः ।

3. AGASTYA HARITAKI AVALEHA II.

द्वितीयोऽगस्त्यहरितक्यवलेहः ।

दशमूलीं स्वयङ्कुशां शङ्खपुष्पीं शठीं वलाम् ।
 हस्तिपिप्पल्यपामार्गपिप्पलीमूलचित्रकान् ॥
 भार्गीं पुष्करमूलं च द्विपलांशान् यवाढकम् ।
 हरितकौशतं चैकं जले पञ्चाढके पचेत् ॥
 यवैः सिद्धैः कषायं तं पूतं तच्चाभयाशतम् ।
 पचेद्भुङ्क्तुलां दत्त्वा कुडवं च प्रथग्धृतात् ॥
 तैलाच्च पिप्पलीं वृणांस्त्रिंशे शीते च माक्षिकात् ।
 कुडवं, पलमानं च चतुर्जातं समावपेत् ॥
 लिङ्गाद्वा चाभये नित्यं ततः खादेद्रसायनात् ।
 वलीं च पलितं हन्याद्वर्णायुर्बलवर्धनम् ॥
 पञ्च कासान् चयं त्रासं सहिष्णुं विषमज्वरम् ।
 गुल्मेहृद्यहृत्प्लीहोद्वेगांरुचिपीनसान् ॥
अगस्त्यविहितं धन्वमिदं श्रेष्ठं रसायनम् ।
 यथोद्दिष्टान् गुणं कुर्वन्पित्तं चैत्कुरुते यदि ॥
 तदा सायं गुडो योज्य एष एवाल्पमात्रया ।
 पादशेषे कषायेऽत्र स्विन्ना विद्याहरितकीः
 भर्जितास्तिलतैलस्य कुडवे गोघृतस्य वा ।
 पचेत्ताम्रमये पात्रे आपाकाङ्क्षोद्वितीदयात् ॥
 शङ्खया फलानां शतशश्चातुर्जातं प्रथक्पलम् ।
 बद्धा पोटलके पथ्या यवान् स्विन्नांश्च कारयेत् ॥

4. AGASTI HARITAKI.

अगस्ति हरितकी ।

The same formula as No. 2.

AGASTI RASĀYANA.

अगस्ति रसायन ।

The same formula as No. 2.

AGASTYA HARITAKI.

This formula "Agastya Haritaki" also occurs in another recension in the C. S., vi, 20, 734.

C. D., xi, 37, 219.

Bower Ms., II, vv. 436-440.

V. S., xii, 276.

In the Vaṅgasena, it is found with two additional lines were first of which adds, as a further ingredient, one pala each of the *Chatvrjāta* or 'set of four spices.' The other explains the name *Agastya-haritakī* by which the formula is there called, to have been given to it, because it was composed by the great sage Agastya, and because it contains 'one hundred *haritakī* or 'chebulic mysobalani.'

Bower Ms., p. 119, F. N. 171.

5. AGASTYA AVALEHA.

अगस्थ्य अवलिहः ।

द्विपञ्चमूलभक्षणात्मगुप्ताभार्गी शठीपुष्करमूलविश्वान् ।
पाठास्तथायनिक शङ्खपुष्पीरास्त्रान्यपामार्गी वलायवासान् ।
द्विपालिकान्नस्य यवादकच हरीतकीनाच्च शतं गुरुणां ॥
द्रोणे जलस्यादक संयुते च काथे कृते पूतचतुर्थभागे ।
पचेत्तुलां शुद्धगुडस्य दत्त्वा प्रयक्त्वतेलात् कुडवं घृताच्च ।
चूर्णञ्च तावन्नगधीहवायाः देयञ्च तन्मन्मधु सिद्धशीते ।
रसायनात् कल्कमतो विलिह्याद्वेचामये नित्यमथाशु हन्यात् ॥
तद्राज्यञ्चग्रहणी प्रदोषशीफाग्नि-मान्द्यस्वरभेदकासान् ।
पाण्डूनामय श्वासशिरीविकारान् हृद्रोगद्विक्काविषमज्वरांश्च ॥
मेधावलीत्साहमतिप्रदञ्च त्रकारचेतद् भगवानगस्थ्यः ।

5. AGASTYA ABHAYĀ AVALEHA.

अगस्त्याभयानामावलिहः ।

शङ्खाद्वादशमूलपुष्करशटीयासः स्वगुप्तावला-
पामार्गभक्त्या मृत्तौषधवक्त्रौ यन्त्राग्निभाङ्गी रसाः ।
ह्यामाः पथ्यशतं यवादृक्कमपां पञ्चादृक्कञ्चायव-
स्त्रेदात् पाच्यमिमाः शिवाः सच रसो गोडीतुलाञ्जलिः ॥
कृष्णतैलघृतात् पुनः कुडविकोच्चौट्रैरगस्त्याभया
कासाऽशोयहृणी-जय-ज्वर-जरा-श्वास-प्रतिश्यारुचौ ।

6. AGASTI RASA.

अगस्तिरसः ।

रसोऽशमालीजयपाललोहशिलाहरिद्रावलयः समांशाः ।
व्याघ्राग्निभृङ्गाद्रकनिस्त्रनीरैः निर्गुण्डिकारग्वधमूलकाङ्गिः ॥
पृथग्विमद्धोदिरनाशनोऽयमगस्तिरसः सशिवागुडोऽयम् ।
सम्पाचनादिक्रमयद्दृढे वल्ङ्गयोऽथ क्रमसंयुतो वा ॥
कम्पितचूर्णेन समञ्च दत्त्वा जलोदरादीन् जयतोह रोगान् ॥

7. SURANA VATĪKĀ.

सूरणवटिकाः ।

षोडश सूरणभागा बह्वेरष्टौ सहौषधस्यापि ।
अध्वनं भागयुक्तिर्मरिचस्य ततोऽपि चाध्वनं ॥
विफला कणा समूला तालीसारुष्करक्कमिध्नानाम् ।
भागो सहौषधसमा दहनांशो तालमूली च ॥
भागः सूरणतुल्यो दातव्यो ब्रह्मदारुकास्यापि ।
भृङ्गेली मरिचांशे चूर्णोऽस्मिन्भोजयेन्नतिमान् ।
दिगुणेन गुडेन युतः सेव्योऽयं भोदकः प्रकाशधनैः ।
गुरुहृष्यभोज्यरहितेष्वितरेषूपद्रवान्कुरुते ॥
भक्षकमनेन जनितं पूर्वमगस्त्यस्य योगराजिन ।
भौमस्य सारुतेरपि येन ते महाशना जाताः ॥

अग्निबलवृद्धिहेतुर्न केवलं सूर्यो महावीर्यः ।
 प्रभवति शस्त्रचाराग्निभिर्विनाप्यर्शसासेषः ॥
 श्वयधुल्लीपदगरजिङ्गहणी च कफानिलाज्वाताम् ।
 नाशयति वल्लीपलितं मेघां कुरुते वृषत्वं च ॥
 ह्रिकां कासं श्वासं सराजयक्ष्मप्रमेहांश्च ।
 श्लोहानमप्यथोगं हति च रसायनं पुंसाम् ॥

8. MAHĀ LAKSMĪBILĀSA RASA.

महालक्ष्मीविलासी रसः ।

पलं वज्राश्च चूर्णस्य तदर्द्धं गन्ध-पारदं ।
 वङ्गभक्ष्यं तदर्द्धञ्च तदर्द्धं तारकस्य च ॥
 तत् समं हरितालञ्च तदर्द्धं ताम्रभक्ष्यकं ।
 रस तुल्यञ्च कर्पूरं जाती-कोष-फलं तथा ॥
 वृद्धदारक-बीजञ्च बीजं स्वर्णफलस्य च ।
 प्रत्येकं कार्ष्णिकान् सागान् स्रत-स्वर्णञ्च शानकं ॥
 नागवल्ली रसैः पिष्ट्वा विगुह्णाफलं मानतः ।
 वटी कार्यानुपानञ्च व्याधिं वीक्ष्य प्रयोजयेत् ।
 निहन्ति सन्निपातोल्यान् गदान् चौरान् सुदारुणान् ।
प्रोक्तं प्रयोगराजोयं श्रगस्त्येन महात्मना ॥
महालक्ष्मीविलासोऽयं वासुदेव जगत्गुरुः ।
 अस्य प्रसादात् भगवान् लक्षनारीषु वल्लभः ॥

9. VRĤAT VIṢṆU OIL.

वृहद्विष्णु तैलं ।

गुहाकर्णान्द्राश्वगन्धाश्च वृहद्विष्णौ चन्दनं निशि ।
 शालपर्णीवर्षमाण्डपूतिकाङ्गि कुरगटकाः ॥
 गवेधूकवलाम्भीरुविसविश्वकणागुरु ।
 लवङ्गं चन्दनं चोचं कक्कोलं वणिता शिवा ॥
 जातीकोषफलं दारु पयस्या पुष्करं शटी ।
 तालीशकुङ्कुमं धात्री मांसी शैलससुङ्गवं ॥

वुटिवल्कलकोशोरयायिकं कल्क सुत्तमं ।
 पृथक् कर्षं समादाय तैलप्रस्थं पचैत् सुधीः ।
 चतुर्गुणं मज्जाक्षीरं तत्तुल्यं जलमेव च ।
 यद्वा चतुर्गुणं गव्यं क्षीरं वारिच तत्र वै ॥
 हन्यभ्यङ्गात् नभस्सन्तप्रदुष्टं पित्तमुल्लभं ।
 वलासं तत् समुद्भूतान् रोगानति मुदाह्वयान् ॥
 बाधिर्यं खाञ्जा पङ्कजं मूकमिन्मिनगदगदान् ।
 अश्लीलां ग्रहणीरोगमर्द्धितं कर्णनादकं ॥
 स्तिका गर्भिनीरोगमिन्द्रलुप्तां जरां जयेत् ।
बृहद्विणुतैलमेतद्गन्ध्यं न च भाषितं ॥
 सेवनादस्य सर्व्वस्मात् सुच्यते विषनाद्भदात् ॥

10. BHĪMA VATIKĀ.

भीम वटिका ।

त्रिफलसमधजानां सूक्ष्मतालीशपत्रं
 क्रिमिरिपुमगधानां पुष्करं चैत् समांशः ।
 सरिचदहनभागश्चैकभागेन शुण्ठी
 सकलतुलितुल्यः शूरणस्यैकभागः ।
 मदनचपलपुक्तं बृहदारैलभृङ्गं
 कृतमिह परिचूर्णं द्विगुणो जीर्णखण्डं ।
 कृतवटकमुखस्तु प्राशते यो मनुष्यो
 हरति जठररोगं तस्य चाशु प्रकर्षम्
 गुदजङ्घधिरपित्तं कासमन्दग्रिशूलान्
 क्षयतमकहलीमान् कामलांश्च क्रिमींश्च ।
 विदधति बलपुष्टिं दापयेच्चाशु मार्गे
 प्रबलयति हुताशं योगराजप्रसिद्धः ।
 योगराजेन युञ्जीत स्वयमेवाप्यगस्तिना ।
 अस्य योगस्य योगेन भीमोऽपि बहुभक्षकः
 इति भीमवटको नाम ।

CYAVANA.

The legend of Cyavana and the Aśvins is related in Śatapatha Brāhmaṇa and also in the Mahābhārata. The cure of Cyavana by the heavenly physicians is thus described in the Śatapatha Brāhmaṇa, IV, 1, 5, 1 ff.:—

Cyavana assumed a shrivelled form to perform austerities. Sons of King Saryātas incensed the Rṣi by throwing clods against him. Cyavana created discord among them. Saryāta appeased the sage by giving him her daughter Sukanyā in marriage. The Aśvins tried to seduce her pointing out to her husband's appearance. She refused to abandon her husband. Cyavana advised her to tell them that he would make the Aśvins perfect if they make him young again. Cyavana was bathed in a pond and recovered his youth. The gods were then informed that they have been excluded from a sacrifice in Kurukṣetra. The Aśvins remonstrated but were told by the other gods that as they wandered about very familiarly among men performing cures, they have been excluded. The Aśvins pointed out that the sacrifice was headless. The gods invited them. The Aśvins restored the head of sacrifice, became the adhvaryu priests and received the Aśvina draught.

In the Taitt. Saṁ., VI, 4, 9, 1 it has been further added that when the Aśvins restored the head of sacrifice, the gods purified them as they were unclean, for going among men as physicians. Hence no Brāhmaṇ must act as a physician as it makes him unclean and unfit to sacrifice.

In the Mahābhārata, Vanaparva, 10, 316 ff, a somewhat different version of the same story is given: Cyavana was covered by an anthill; Sukanyā pierced his eyes, and Cyavana afflicted Saryāta's army with stoppage of urine. The sage was given Sukanyā as wife to appease him. Aśvina restored Cyavana to beauty, on condition that she would be at liberty to choose any one of the Aśvins and Cyavana as her husband. Sukanyā recognised her husband Cyavana. The sage performed a sacrifice for the king and gave the Aśvins a share in the oblation. Indra objected, as Aśvins were physicians, but the sage stayed the arm of Indra when he was about to use his thunder-bolt and compelled him to submit.

He is the famous sage Cyavana, the son of Bhṛgu. When advanced in age he could not give up desires, and married the young and beautiful Sukanyā, the daughter of Śaryāti. He regained his youthful vigour by the judicious medication of the two Aśvins. He repaid the debt of gratitude by compelling Indra to drink with them Soma juice when he refused to do so. The legend is thus related in the Mahābhārata:

"Having given a promise to that effect, Chyavana applied, along with the other gods, to Indra, to allow the Aśvins to partake in the soma juice. Indra answered 'How can they become drinkers of the soma, seeing they are reviled by us, and are not on an equality with the gods? We do not wish to drink soma in their company; but we shall accede to your wishes in any other respect.' Chyavana repeats his request, and urges that the Aśvins also are gods, and the offspring of the sun (7310). He adds that it will be well for the gods if they accede to this demand, and ill if they do not. Indra rejoins that the other gods may drink with the Aśvins if they please, but he cannot bring himself to do it. Chyavana

retorts that if he does not, he shall be chastised by the sage, and made to drink soma (with them) at the sacrifice. A ceremony was then instantly begun by Chyavana for the benefit of the Aśvins; and the gods were vanquished by sacred texts. Indra, seeing this rite commenced, became incensed, uplifted a vast mountain (7315) and rushed with his thunderbolt, and with angry eyes, on Chyavana. The sage however sprinkling him with water, arrested him with his mountain and thunderbolt. Chyavana then created a fearful open-mouthed monster, called Mada, formed of the substance of the oblation **. Finding themselves in this predicament, the gods took counsel and said to Indra, 'Make salutation to Chyavana and let us drink soma along with the Aśvins, and so escape from our sufferings.' Indra then, making obeisance, granted the demand of Chyavana, who was thus the cause of the Aśvins becoming drinkers of the soma. He then performed the ceremony, and clove Mada to pieces."¹

Formulae ascribed to Cyavana :—

1. The Cyavana Prāśa or the Cyavana Clarified Butter. This formula is ascribed to the sage Cyavana and it is still much used by the Kavirajes of the present days.

The Cyavana Prāśa—See C. S., vi. I. pp. 312-3.
 C. D., X. v. 20. pp. 95-6.
 A. H. S., vol. II,
 vi. 39. p. 338.
 H. S., III. 9. pp. 180-1.
 Sā. S., II. 8. pp. 142-3.
 Bower Ms., II. p. 98.
 Sataślokī, p. 32.
 G. N., vol. I, p. 160.
 V. K. V., p. 145.

¹ Muir's Sanskrit Texts. Vol. I, pp. 470-71.

In the Hārīta Saṁhitā, the formula is ascribed to Kṛṣṇātreyā who is said to have taught it.

चयरीगर्विनाशाय कथितचचिषा सहत् ।

च्यवनप्राशनं नाम कृष्णविशेष भाषितं ॥

2. Laghu Cyavana Prāśa—G. N., 1., p. 163.

For the English translation of Cyavana Prāśa, See Bower Ms., p. 98.

1. CYAVANA PRĀŚA.

च्यवनप्राशः ।

विश्वामित्रस्यै श्लोकाः काश्मर्यं पाटलिर्दत्ता ।

पर्युषतस्तः पिप्लवः श्वदंष्ट्रा वृहतीहयम् ॥

शङ्खी ताम्रलकी द्राक्षा जीवन्ती पुष्करागुरुः ।

अभया चान्द्रता चृद्धिर्जीविकर्षभकौ शटी ॥

सुस्तं पुनर्नवा मेदा एला चन्दनसुत्पलम् ।

विदारौष्ठसूतानि काकोली काकनासिका ॥

एषां पलोन्मितान् भागान् शतान्यामलकस्य च ।

पञ्च दद्यात् तदैकच जलद्रोणे विपाचयेत् ॥

ज्ञात्वा गतरसान्वेतान्यौषधान्यथ दं रसम् ।

तन्नामलकसुहृत् निष्कुलं तैलसर्पिषोः ।

पलद्वादशकैश्च दत्त्वा चार्हतुलां शिषक् ।

मत्स्याण्डिकायाः पूताया लिङ्गवत् साधु साधयेत् ॥

षट्पलं सधुनश्च सिद्धशीते समावपेत् ।

चतुष्पलं तुगाचीयाः पिप्लोद्विपलं तथा ॥

पलमेकं निदध्याच्च त्वगीलापयकेशरात् ।

इत्यथ च्यवनप्राशः परसुक्तौ रसायनः ॥

कासश्वासहरश्चैव विशेषेणोपदिश्यते ।

क्षीणवतानां हृद्धानां बालानाञ्चाङ्गवर्द्धनः ॥

स्वरक्षयसुरीरोगं हृद्रोगं वातशीघ्रितम् ।

पिपासां सूचशक्रस्थान् दीपांश्चाप्यपकर्षति ॥

अस्य सावां प्रयुञ्जीत योपरुद्धान्न भोजनम् ।

अस्य प्रयोगाच्चावनः सुदृढोऽभूत् पुनर्युवा ॥

मेधां स्मृतिं कान्तिमनामयत्वमायुःप्रकर्षं बलमिन्द्रियाणाम् ।

स्त्रीषु प्रहर्षं परमग्निवृद्धिं वर्षप्रसादं पवनानुलोम्यम् ॥

रसायनस्यास्य नरः प्रयोगात्कथमेत जीर्णोऽपि कुटीप्रवेशात् ।

जराकृतं रूपमास्य सर्व्वं विभर्त्ति रूपं नवयौवनस्य ॥

इति च्यवनप्राशः ।

2. LAGHU CYAVANA PRĀŚĀ.

लघुच्यवनप्राशीऽवल्लिहः ।

विल्लादिपञ्चमूलान्द्वलापणोचतुष्टयम् ।

वृद्धिक्लृणाशठीपथ्याजीवकर्बभकाशताः ॥

द्राक्षा पुनर्नवा सेदे जीवन्ती काकनासिका ।

उत्पलैलाजशृङ्गश्च काकोली वृषचन्दनम् ॥

विदारोगीचुरव्याघ्रौपौष्करं च पलोन्मितम् ।

शतानि पञ्च धात्र्याश्च जलद्रोणे विपाचयेत् ॥

पलद्वादशके भृङ्गा धात्रीस्तासैलसर्पिषोः ।

सिताघृतलया युक्ताः काथे लौहं पुनः पचेत् ॥

द्वे पिप्पल्या पले वांश्पाश्चत्वारः षट् च साक्षिकात् ।

चातुर्जातपलं तस्मिन् सिद्धशीते निर्योजयेत् ॥

हृद्रोगश्चासहृत्कासवातरक्तचयार्तिजित् ।

सेव्योऽयं च्यवनप्राशः स्वर्ग्यो हृष्यो रसायनः ॥

Books :—

Jivādāna : In the Brahmaparivarta Purāṇa : Cyavana is mentioned as the author of a medical treatise called Jivādāna (the Giver of Life). See Vol. I, 1, p. 7, foot-note. The book is not available now.

BHARADVĀJA.

A Vedic sage and composer of hymns. He was the son of Vṛhaṣpati and father of Droṇa, the preceptor of the Pāṇḍavas. His mother was Mamatā, the wife of Utathya. "He became immortal and ascended to the heaven" (Taittirīya Brāhmaṇa). It is said that his mother, became pregnant, both by her husband Utathya and by Vṛhaṣpati. Dīrgha-tamas, Utathya's son, kicked his half-brother. out of her womb untimely, when Vṛhaṣpati said to his mother "Bhara-dva-jam" "Cherish this boy of two fathers," and cursed Dīrgha-tamās to be blind. See Viṣṇu Purāṇa, Sec. IV, Ch. xix. In the Mahābhārata he appears to have lived at Hardwar, but in the Rāmāyaṇa, Rama and Bharat are said to have gone to his hermitage at Allahabad. (Ayodhyākanda Ch. 54, 90-91). One of Bharadvāja's sons is Garga Ṛṣi.

In the Caraka Saṁhitā, I. i., Bharadvāja was the sage selected by the Ṛṣis, to go to Indra to learn the science of life.

दीर्घजीवितमन्विच्छन् भरद्वाज उपागमत् ।

इन्द्रसुयतपा बुद्धा शरण्यममरेश्वरम् ॥

* * * *

ऋषिप्रोक्तो भरद्वाजस्तस्माच्छक्रमुपागमत् ॥

* * * *

कः सङ्ख्यात्तमवतनं गच्छेत् प्रष्टुं शचीपतिम् ।

अङ्गमर्थं नियुज्येततेति प्रथमं वचः ।

भरद्वाजोऽब्रवीत् तस्मादृषिभिः स नियोजितः ॥

When Bharadvāja came back, the sages learned the science of medicine from him.

तेनायुरमितं लेभि भरद्वाज सुखान्वितः ।

ऋषिभ्योऽनधिकं तन्तु शशंसानवशेषयन् ॥

ऋषयश्च भरद्वाजाज्जगृह्णन् प्रजाहितम् ।

दीर्घमायुश्चिकीर्षन्तो वेदं वर्द्धनमायुषः ॥

Ātreya Punarvasu was one of the sages and he taught his six disciples, Agniveśa and others. Some think that Punarvasu Ātreya was the same person as Bharadvāja ; but this is untenable for as Cakrapāṇi says : “Ātreya is nowhere described as Bharadvāja in the Caraka Saṁhitā.”

“अत्र केचित् भरद्वाजादियथोरिकं मन्यन्ते, तन्न, भरद्वाजसंज्ञया आत्रेयस्य कचिदपि तन्त्रप्रदेशेऽकीर्तनात्” ।

Āyurveda Dīpikā, p. 15.

Cakrapāṇi also quotes from Hārīta Saṁhitā (but this is not found in the printed edition) that Bharadvāja says :

शक्रादहमधीतवान् इत्यादिना मत्तः पुनरसंख्ययाः विसृज्य विप्रयोजनम् ।

अत्रात्रेयादिपर्यन्ता दिदुः सप्तमहर्षयः । आत्रेयात् हारीतऋषिः इत्यन्तेन ॥

But in the Astāṅga Hṛdaya Saṁhitā, Indra is said to have taught the sons of Atri, i.e., Ātreya and others : and the name of Bharadvāja is not mentioned :

ब्रह्मा सृत्वायुषोवेदं प्रजापतिमजिग्रहत् ।

सोऽश्विनौ तौ सहस्राचं सोऽविपुत्रादिकान् सूनीन् ॥

So there is discrepancy between the accounts given by Hārīta and Vāgbhaṭa ; but this seeming anomaly is more apparent than real for in the Rasāyanapāda Samutthāniya, Indra is said to have taught the sages Bhṛgu, Aṅgīrā,

Atri, Vaṣiṣṭha, Kaśyapa, Agastya, Pulastya, Vāmadeva and Asita Gautama. (See "Indra.") Here we find Atri as one of the Ṛṣis who learned the science of medicine from Indra; and the name of Bharadvāja is not mentioned. [See Caraka Saṃhitā VI, i. p. 323.] Vagbhata seems to have this passage in mind when he wrote about the teachers of Āyurveda. Cakrapāṇi Datta also takes the same view: वामटेन तु वदुक्तं "ब्रह्मा..... मूनीन्" इत्यनेनावेयस्य इन्द्रशिष्यत्वं, तदायुर्वेदसमुत्पत्तीय रसायनपादे आदि शब्देन वक्ष्यमाणेन्द्र शिष्यतायोगात् समर्थनीयम्; तत्र हीन्द्रेण पुनर्ब्रह्मणासायुर्वेद उपदिष्ट इति वक्तव्यम्।

Bhāva Mīśra also makes both Ātreya and Bharadvāja the disciples of Indra. On different occasions, they went separately to Indra to learn the science of medicine.

Ātreya:

चिन्तयामास भगवानात्रेयो मुनिपुङ्गवः।

किं करोमि क्व गच्छामि कथं लोका निरामयाः ॥

* * * *

आयुर्वेदं पठिष्यामि नैरुज्याय शरीरिणाम्।

इति निश्चित्य गतवानात्रेयस्त्रिदशालयम् ॥

* * * *

आयुर्वेदोपदेशं मे कुरु कारुण्यतो नृणाम्।

तथेलुक्ता सहस्राक्षोऽध्यापयामास तं मुनिम् ॥

Bharadvāja:

तन्त्रेषां प्रशमाय कश्चन विधिश्चिन्त्यो भवद्विर्वै

योग्यैरित्यभिधाप्य संसदि भरद्वाजं मुनिं तेषुवन।

त्वं योग्यो भगवन्। सहस्रनयनं याचस्व लब्ध्वा क्रमा

दायुर्वेदमधीत्य यं गङ्गयान्मुक्ता भवामीवयम्।

इत्थं स मुनिभिर्योग्यैः प्रार्थितोः विनयान्वितैः।

भरद्वाजो मुनिश्रेष्ठो जगाम विदशालयम् ॥

तत्रेन्द्र भवर्नं गत्वा सुरधिगणमध्यगम्।

दृष्टवान् द्रवहन्तारं दीप्यमानमिवानलम् ॥